DETAILED ACADEMIC CURRICULUM VITAE

# Kuruvilla Joseph



Prof. | PhD, FRSC, FASI

**Distinguished Professor & Pro-Vice Chancellor**

Indian Institute of Space Science and Technology (IIST)
Department of Space, Government of India

Prof. Kuruvilla Joseph is an internationally acclaimed materials scientist, higher-education strategist, and institution builder serving as Distinguished Professor and the first Pro-Vice Chancellor of the Indian Institute of Space Science and Technology (IIST), under the Department of Space, Government of India.

A globally recognized authority in polymers, functional nanocomposites, and sustainable biomaterials, his research output—comprising 250+ peer-reviewed publications, nearly 20,000 citations (h-index 70), ten landmark reference volumes published by Elsevier, Wiley, and RSC, and three granted patents—places him in the Stanford University–Elsevier World's Top 2% Scientists list for six consecutive years. Through rigorous academic mentorship, he has guided 22 Ph.D. graduates into leadership roles across academia and national R&D.

| 250+ | 10 | 3 | 22 | 70 |
|---|---|---|---|---|
| Career journal papers | Edited books | Granted patents | Doctoral graduates | h-index |

19,874 citations | Research indicators recorded in October 2026.

## A detailed public academic record

This edition brings together academic appointments, institutional contributions, research projects, teaching and supervision, professional service and the publication catalogues. It includes all 228 individually catalogued journal articles and reviews, 56 book chapters and 58 selected programme records published on the website. The wider career overview reports 250+ journal papers; the catalogue is not a claim to reproduce that full total.

Project and programme status follows the cited source record; historical descriptions do not establish current enrolment, tenure or project status. The supplied professional record is dated September 2026, with the website's October 2026 appointment corrections and research indicators retained.

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READING THE RECORD

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## Publication and supervision boundaries

Journal articles and reviews, book chapters and edited volumes are separated throughout. Programme records are grouped by degree stage; they are not a census of distinct people or current students. Missing award years, thesis titles, employment details and completed-project dates are not inferred.

ACADEMIC RECORD / 01

# Academic formation & appointments

## Education and doctoral research

### PhD - Polymer Chemistry

1988-1993

Doctoral research at CSIR-National Institute for Interdisciplinary Science and Technology (formerly the Regional Research Laboratory), Thiruvananthapuram, in collaboration with the School of Chemical Sciences, Mahatma Gandhi University, Kottayam. Jointly supervised by Prof. Sabu Thomas and Dr. C. Pavithran.

### MSc · Analytical Chemistry

1985-1987

Mahatma Gandhi University

### BSc · Chemistry

1982-1985

University of Kerala

## Postdoctoral research

### Federal University of Paraíba, Brazil

Postdoctoral Fellow | 1998-1999

### Swedish Institute of Composites (SICOMP), Sweden

Postdoctoral Fellow | 2001

## Academic and administrative appointments

Appointments may overlap because academic rank and administrative responsibility are separate roles.

### Distinguished Professor

September 2025-present | Indian Institute of Space Science and Technology

The first IIST faculty member elevated to this rank through promotion by the Department of Space, Government of India. Higher Administrative Grade+ (HAG+); Pay Level 16 · 7th CPC.

### Pro-Vice Chancellor

July 2025-present | Indian Institute of Space Science and Technology

Appointed the institute’s first Pro-Vice Chancellor.

### Registrar

2023-30 September 2026 | IIST

Senior institutional administration, statutory governance and infrastructure coordination, concluded on 30 September 2026. Earlier acting appointments: 8 November 2021-19 January 2022 and 11 August-18 October 2022.

### Dean (Academics)

February 2024-February 2026 | IIST

Led institute-wide NEP implementation, academic audits, curriculum review and student-focused academic reforms. The detailed September 2026 record dates this appointment to February 2024-February 2026.

### Outstanding Professor

2020-2025 | IIST

Advanced materials research, teaching and research mentorship.

### Dean (Student Activities)

2015-2024 | IIST

Leadership in student activities, student welfare and outreach before his deanship of Academic Affairs.

### Senior Professor

2013-2020 | IIST

Research and postgraduate teaching in chemistry and advanced materials.

### Head of Chemistry

2007-2015 | IIST

Founding Head of the department, helping establish its teaching, laboratories and research programme.

### Professor

2007-2013 | IIST

Joined as the institute’s first Professor during its founding year.

### Reader in Chemistry

2003-2007 | St. Berchmans’ College, Changanacherry

Teaching and research in chemistry and polymer materials. Appointed Lecturer (Selection Grade) on 28 September 2003 and redesignated Reader on the same day.

### Lecturer (Senior Scale) in Chemistry

1998-2003 | St. Berchmans’ College, Changanacherry

Undergraduate and postgraduate teaching alongside materials research.

### Lecturer in Chemistry

1994-1998 | St. Berchmans’ College, Changanacherry

Joined the Department of Chemistry in 1994.

### Lecturer in Chemistry

1993-1994 | St. Xavier’s College, Thumba, Thiruvananthapuram

Beginning of his college teaching career.

## International visiting appointments

### Visiting Scientist - Germany

2003-2004 | Polymer composites

Institute of Materials Science, Martin Luther University Halle-Wittenberg

### Visiting Researcher - Brazil

2000; 2004-2006 | Polymer composites

CNPDIA / Embrapa, São Carlos

### Visiting Researcher - Sweden

2006 | Polymer composites

University College of Borås

ACADEMIC RECORD / 02

# Research directions & collaborations

## 01 Epoxy toughening

Toughening strategies for epoxy thermosets combine polymer modifiers with carbon-based nanomaterials. The research examines hybrid reinforcement, interfacial interactions and the relationship between material architecture and mechanical performance.

Research themes: Epoxy thermosets; Graphene-based hybrids; Polymer interfaces.

## 02 Electromagnetic interference shielding

Lightweight functional composites are developed for electromagnetic interference shielding. Carbon fibres, graphene and polymer hybrids connect electrical response with processing, mechanical properties and shielding performance. Recent work extends this direction to polyimide composite aerogels with direction-dependent shielding and thermal insulation.

Research themes: EMI shielding; Carbon fibres; Functional composites.

## 03 Biosensors and nanobiomedical materials

Functional nanoparticles and luminescent gold quantum clusters provide platforms for molecular recognition and sensing. The work includes fructose-specific binding, cholesterol recognition and creatinine sensing, together with nanomaterial approaches to biomedical applications.

Research themes: Gold quantum clusters; Biosensors; Nanobiomedical research.

## 04 Carbon materials from low-cost precursors

Renewable and low-cost feedstocks offer routes to functional carbon materials. Lignin, coconut husk and coir-pith-derived precursors are explored for carbon films, carbon fibres and nanomaterials, linking resource utilisation with material design.

Research themes: Low-cost precursors; Lignin; Biomass-derived carbon.

## 05 Fibre-reinforced composites

Natural and synthetic fibre reinforcements are studied through fibre-matrix compatibility, processing and structure-property relationships. The research addresses interfacial adhesion, mechanical performance and the design of sustainable composite systems.

Research themes: Natural fibres; Composite processing; Interfacial compatibility.

## 06 Rubber and polymer nanocomposites

Elastomer blends and polymer nanocomposites combine flexible matrices with functional fillers. The research explores processing, morphology, thermal behaviour and mechanical performance, with applications in functional and engineering materials.

Research themes: Rubber nanocomposites; Polymer blends; Hybrid materials.

## 07 Green nanomaterials, energy and environment

Green nanomaterials bring together sustainable preparation methods and applications in energy conversion, storage and environmental technologies. This direction connects biomass-derived materials, nanomaterial characterisation and environmental remediation with the development of greener materials systems.

Research themes: Green synthesis; Energy materials; Environmental technologies.

## International research network

Institutions listed as research collaborators in the supplied professional record; this list does not assert a current agreement or formal institutional MoU. Historical institutional names are retained.

### India

- Indian Institute of Science, Bengaluru
- Indian Institute of Technology Madras
- Indian Institute of Technology Bombay
- Rubber Research Institute of India, Kottayam
- CSIR-National Institute for Interdisciplinary Science and Technology, Thiruvananthapuram
- Vikram Sarabhai Space Centre, ISRO
- School of Chemical Sciences, Mahatma Gandhi University
- Department of Polymer Science and Rubber Technology, Cochin University of Science and Technology

### Brazil

- Department of Materials Engineering, Federal University of Paraíba, Campina Grande
- Department of Civil Engineering, Federal University of Rio de Janeiro, COPPE/PEC
- CNPDIA / Embrapa, São Carlos

### Sweden

- Luleå University
- School of Engineering, University College of Borås
- Swedish Institute of Composites (SICOMP), Piteå

### Germany

- Institute of Materials Science, Martin Luther University Halle-Wittenberg

### South Korea

- Hanyang University, Seoul

### Russia

- Siberian Federal University

ACADEMIC RECORD / 03

# Sponsored & collaborative projects

Four projects were recorded as ongoing in September 2026, alongside seven completed projects. Dates, funding values and individual investigator roles are stated only where the professional record supplies them.

## 01 Conducting polyimide composites for electrostatic charge mitigation

Ongoing · September 2026 | IIST-ISRO | Phase II

Intrinsically conducting polyimide composites incorporating carbon nanotube/graphene hybrids, with charge-mitigating characteristics for space applications.

Principal Investigator: Prof. Kuruvilla Joseph

Co-investigators: Dr. Muralikrishnan and Dr. R. S. Rajeev, VSSC

## 02 Development of a novel $N_2O_4$ scrubber system

Ongoing · September 2026 | IPRC, Mahendragiri

Collaborative development of a scrubber system for dinitrogen tetroxide ($N_2O_4$).

Principal Investigator: Prof. Kuruvilla Joseph

Co-Principal Investigators: Dr. Salih A. and Dr. K. Prabhakaran, IIST

IPRC collaborators: S. Ramachandran and I. Isaac Sam, CHAT Division

## 03 Plasma-functionalised CNT-polymer nanocomposites for satellite structures

Ongoing · September 2026 | VSSC-IIST collaboration | Phase II

Plasma-functionalised carbon nanotube-polymer nanocomposites for satellite structural applications.

Principal Investigator: Dr. N. Gomathi

Co-investigators: Prof. Kuruvilla Joseph and Dr. C. Gouri, VSSC

## 04 Graphene-enhanced zinc-rich epoxy coatings

Ongoing · September 2026 | VSSC-IIST collaboration

Graphene nanoplatelets incorporated into zinc-rich epoxy coatings for corrosion protection of steel hardware.

Principal Investigator: Dr. Mary J. Gladis

Co-investigators: Prof. Kuruvilla Joseph and Dr. Remya, VSSC

## 05 Renewable-resource polymers reinforced with cellulose microfibrils

Completed | University Grants Commission (UGC)

Preparation and properties of renewable-resource polymer microcomposites reinforced with cellulose microfibrils.

The completed-project record identifies the research and funding body; an individual investigator role and project dates are not specified.

## 06 Halobutyl rubber nanocomposites for space applications

Completed | Indian Space Research Organisation (ISRO)

High-performance halobutyl rubber nanocomposites for critical space applications.

The completed-project record identifies the research and funding body; an individual investigator role and project dates are not specified.

## 07 Polymer-impregnated rubberwood composites

Completed | Government of Kerala · science & technology funding

Preparation and characterisation of polymer-impregnated rubberwood composites.

The completed-project record identifies the research and funding body; an individual investigator role and project dates are not specified.

## 08 Ion-beam irradiation of rubber latices and blends

Completed | Nuclear Science Centre · UGC

Ion-beam irradiation of natural and synthetic rubber latices and their blends.

The completed-project record identifies the research and funding body; an individual investigator role and project dates are not specified.

## 09 Crystallisation and molecular orientation in thermoplastic vulcanisates

Completed | DST-DAAD · India-Germany

Spherulite growth, fractionated crystallisation, kinetics and molecular orientation in nitrile-rubber/isotactic-polypropylene thermoplastic vulcanisates.

The completed-project record identifies the research and funding body; an individual investigator role and project dates are not specified.

## 10 Cost-effective sisal-fibre/polypropylene products

Completed | Government of Kerala · science & technology funding

Development of cost-effective products from short sisal-fibre-reinforced polypropylene composites.

The completed-project record identifies the research and funding body; an individual investigator role and project dates are not specified.

## 11 Low-cost sisal/glass hybrid-fibre composites

Completed | Government of Kerala · science & technology funding

Development of low-cost sisal/glass hybrid-fibre-reinforced low-density polyethylene composites.

The completed-project record identifies the research and funding body; an individual investigator role and project dates are not specified.

ACADEMIC RECORD / 04

# Contributions to IIST

Institution building and academic leadership, 2007-2026. Contributions are presented with collective attribution, and recommendations and work in progress remain distinct from completed outcomes.

## 01 Establishing an institute for India’s space programme

2007 · FOUNDING PHASE

Working alongside IIST’s leadership and ISRO scientists, Prof. Joseph played a pivotal role in establishing the academic, research and student-support foundations of the new institute.

### Academic foundations

Helped frame the first curriculum and programme structure with ISRO scientists and leading academics, under the Curriculum Committee chaired by Prof. R. Natarajan, former Chairman of AICTE, aligning the programmes with the needs of India’s space effort.

### People & research culture

Supported the Chairman of ISRO and the institute’s Director during the formative phase. Assisted recruitment of the first faculty and staff, helped shape the institutional framework and reviewed proposals as a member of the Research Board, nurturing an academic and research culture from the outset.

### Learning connected with ISRO

Coordinated space-related laboratory experiences with VSSC scientists and engineers, and arranged early laboratory partnerships with the College of Engineering, Thiruvananthapuram, and Mar Ivanios College.

### A functioning temporary campus

Enabled academic, administrative and student-support facilities at the temporary ATF campus. Supported computer and internet laboratories at ATF and TERLS; identified rented student accommodation around Thiruvananthapuram before residences became available at ATF; and helped establish dining and sports facilities.

### Student support from the outset

Guided the first batches, facilitated professional counselling through Loyola Extension Center and enabled interactions with eminent scientists from the Indian space programme.

## 02 From the temporary campus to Valiamala

CAMPUS TRANSITION

A core member of the relocation committee, he helped deliver one of the most consequential transitions in IIST’s early development: establishing its permanent residential campus.

### Operational continuity

Led asset cataloguing, numbering and coordinated relocation of academic, laboratory, computing and administrative infrastructure from ATF at VSSC, Veli, to Valiamala, helping make the new facilities operational within weeks.

### Planning a residential institute

Contributed to planning, implementation, monitoring and evaluation of academic and administrative buildings, student residences, dining facilities and the Student Amenity Centre. Coordinated design and procurement for new buildings and supported accommodation across eight well-furnished hostels.

### Scientific infrastructure

Supported advanced laboratories across disciplines and played a key role in establishing the atmospheric laboratory at Ponmudi.

### Campus safety

Helped develop the professional security framework, initially supported by ex-servicemen and subsequently by CISF, alongside facilities for student life and well-being.

## 03 The institute’s first Pro-Vice Chancellor

JULY 2025-PRESENT

As IIST’s first Pro-Vice Chancellor, he supports the Vice Chancellor across academic and administrative functions. The professional record designates the office as second-in-command, with the Registrar reporting to the Pro-Vice Chancellor.

### Institution-wide oversight

The remit covers academic functioning and administrative verticals: Personnel and General Administration, establishment, recruitment, promotion reviews, residential and dining services, Finance and Accounts, Purchase and Stores, the library, civil maintenance, student and faculty residences, medical and health services, transport, vigilance, security and safety.

### Strategy & institutional capability

Helps formulate short-, medium- and long-term goals, assess faculty requirements and guide recruitment, student and faculty development, accreditation, rankings, digital learning and national and international collaboration.

### Academic & community responsibilities

Guides continuous student evaluation, discipline and departmental performance; monitors student and faculty development; addresses faculty and student grievances; supports employee discipline; and liaises with external agencies for academic and research engagements and infrastructure development.

### Delegated Vice Chancellor responsibilities

The professional record assigns the Pro-Vice Chancellor responsibility for discharging the Vice Chancellor’s duties during absence from the institute for a continuous period exceeding three days, while supporting the Vice Chancellor across institutional activities.

## 04 Strengthening institutional governance

REGISTRAR · 2023-SEPTEMBER 2026

His Registrar appointment connected statutory decision-making with the day-to-day administration required to sustain an expanding national institution.

### Statutory processes

Coordinated Board of Management meetings, Departmental Promotion Committee reviews and implementation of decisions of statutory bodies.

### Institutional framework

Worked on revision of IIST’s Memorandum of Association with UGC, coordination with AICTE, UGC and CSIR, and recruitment and assumption of charge by Heads of Department across seven departments on a three-year cycle.

### Administrative coordination

Served as the administrative link between institute leadership and academic and administrative units, communicating policy decisions, following up implementation and overseeing daily administration to support institutional discipline, efficiency and harmony.

### Earlier acting appointments

Served as Registrar in charge from 8 November 2021 to 19 January 2022, and from 11 August to 18 October 2022.

### People-centred administrative improvements

Directed attendance closure by the twentieth of each month and coordinated salary-bill preparation with service providers to support payment to outsourced personnel by the first of the next month. Rescheduled working arrangements to provide faculty preparation time before the first class and enable non-teaching staff to return home earlier.

### Institutional bodies

His career service includes the IIST Governing Body, Board of Management and Academic Council. These are described as part of the institutional record; undated entries do not confirm a current tenure.

## 05 Building the capacity for the next phase

INSTITUTIONAL GROWTH

Coordinated Department of Space approvals and the delivery of infrastructure supporting research, innovation, student welfare and campus operations.

### Facilities brought into operation

Coordinated Department of Space approvals and oversight for facilities brought into operation: two cafeterias, new laboratories, workshop and transport facilities, the new IIST Gate Complex, the Space Technology Innovation and Incubation Centre (STIIC) office complex, medical and counselling facilities, a new hostel office, synthetic turf and a multipurpose ground.

### Development pipeline

At September 2026, two additional hostels were in progress, foundations had been laid for three further hostels, and access-road permission and master planning supported development of the alternate campus. These are distinguished from completed works.

## 06 Leading academic reform across the institute

DEAN (ACADEMICS) · 2024-FEBRUARY 2026

Led institute-wide implementation of the National Education Policy through consultation, expert input and systematic review.

### Consensus & implementation

Initiated and led institute-wide NEP implementation through multiple structured consultations with all departments. Organised expert-led workshops on NEP and curricular reform, worked with departments on implementation and reviewed the first year to identify gaps and refine academic processes.

### Quality & flexibility

Conducted annual academic audits to strengthen quality, compliance and improvement. Oversaw curriculum revision every three years, informed by NEP, emerging disciplines and stakeholder input, and introduced student-focused reforms supporting flexibility, learning outcomes and the academic experience.

### Supporting academic progress

As Examination Committee Chairman, used end-semester result analysis to identify students needing additional support and develop targeted measures.

## 07 A decisive contribution to NAAC A++

IQAC COORDINATION · FROM MAY 2023

Led accreditation coordination and the appeal process that contributed to IIST’s upgrade from A+ to A++, working with departments, administration and institutional leadership.

### Institutional evidence systems

Established a portal for systematic collection and maintenance of evidence on academic activities, research and collaborations, faculty achievements, student progression and institutional initiatives, with emphasis on accurate, updated and retrievable records.

### Accreditation preparation

Coordinated timely preparation and submission of the Self-Study Report and Annual Quality Assurance Reports, identification of external reviewers and multiple rounds of review. Led statutory-compliance and documentation work, two mock visits, subcommittee coordination and detailed arrangements for the three-day peer-team visit.

### Appeal & continuous improvement

Led the IIST appeal team and played a decisive role in the upgrade from A+ to A++, alongside departments, administration and institute leadership. The broader IQAC remit included internal and external academic audits, quality-related activities and the promotion of good practices and innovation.

## 08 Connecting a university with a national research system

ISRO-IIST RESEARCH ENHANCEMENT

As Co-Chair of the ISRO-IIST Research Enhancement Committee, co-led strategic work on expanding research domains and deepening academic-research integration.

### Consultation & policy design

Co-led work on expanding research domains and improving research output at both institutions. Conducted in-person and online consultations, circulated draft reports, incorporated expert feedback and finalised recommendations, drawing on Homi Bhabha National Institute and AcSIR models and discussions of UGC Regulations 2023.

### Committee recommendations

Recommended a model for recognition of ISRO/Department of Space centres as off-campus centres of IIST, supporting collaborative scholar supervision and research integration. This is a recommendation, rather than a claim of implementation.

### Institutional partnerships

Chaired MoU coordination, facilitating agreements with universities and institutes in India and abroad.

## 09 A residential community built around its students

DEAN · STUDENT ACTIVITIES, WELFARE & OUTREACH · 2015-2024

His student-development leadership combined academic mentoring, equity, health, residential governance and a vibrant scientific and cultural life.

### Mentoring & induction

Prof. Joseph chaired the mentoring system and ensured that faculty met students regularly, typically once or twice a week, to review progress and well-being. He supported early identification of students who needed help, as well as additional lectures and tutorials. He also supported Buddy Mentoring. Through the programme, senior students guided first-semester students and those facing academic difficulty. From 2015 to 2025, he coordinated induction for BTech, MTech and PhD students. The programmes introduced institutional values, academic expectations, research culture and support systems.

### Rights, dignity & safety

Chaired the Anti-Discrimination Cell, Anti-Ragging Squad and SC/ST Committee, supporting student rights, equity, dignity and safety in accordance with UGC, Department of Space and ISRO norms. Led mechanisms for an inclusive, respectful and discrimination-free campus.

### Residential welfare

Chaired residential and dining management, with responsibilities for infrastructure, hygiene, grievance redressal and policy implementation. Introduced a council of wardens bringing together Deans, faculty wardens and administration to address concerns promptly, and helped strengthen medical support as a Medical Services Committee member.

### Student life & fair processes

Chaired the Student Activities Board, supporting student clubs, the Annual Sports Meet, Conscientia, DHANAK, IIST Day and celebrations including Onam, Holi, Pongal and Christmas. As Disciplinary Committee Chair, oversaw fair and transparent review of conduct matters under institutional regulations. Structured mentoring, counselling and feedback mechanisms supported student well-being.

### Committee responsibilities recorded

Chairman - Student Activities Board

Chairman - Mentoring System

Chairman - Anti-Discrimination Cell

Chairman - Anti-Ragging Squad Committee

Chairman - Hostel and Canteen Committee

Chairman - SC/ST Committee

Chairman - Hostel Management Committee

Chairman - Disciplinary Committee

Member - Committee for Medical Services for Students

## 10 Extending the institute’s reach

SCHOOLS · COMMUNITY · INDUSTRY

Led programmes that connected IIST with school learners, neighbouring communities, industry and the wider scientific community.

### IIST@Schools

Chaired IIST@Schools, coordinating interactive sessions, demonstrations and lectures by faculty and students to inspire school learners towards space science and technology and strengthen STEM awareness.

### NIRMAAN

Chaired the student-led NIRMAAN social-outreach programme, guiding educational support, awareness and development activities in nearby villages and connecting student participation with community needs and rural development.

### EPISTEME 2022

Chaired the 2022 national technical and science festival, bringing students, researchers and experts together through technical competitions, workshops, invited lectures and outreach programmes supporting scientific curiosity and innovation.

### IIST-Industry Interface

Chaired the 2019, 2020 and 2021 editions, organising structured interactions, invited lectures and collaborative discussions with industry leaders to strengthen partnerships, internships, applied research and student career opportunities.

## 11 Building the systems that welcomed new cohorts

NATIONAL ADMISSIONS · 2008-2016

Held key responsibilities in national entrance testing, student counselling and undergraduate admission.

### National examination operations

Chaired the ISAT Centre Identification Committee in 2010, identifying and finalising centres across India and coordinating infrastructure, accessibility and examination readiness with host institutions and authorities. In 2011, chaired question-paper generation, ensuring confidentiality, academic rigour and alignment with the syllabus and examination standards.

### Admissions & counselling

Chaired Student Admissions in 2012, overseeing eligibility verification, preparation of admission lists and coordination with academic and administrative units. Chaired Student Counselling during 2008-2016 across Delhi, Gujarat, Bengaluru and Kolkata: guiding students and parents, clarifying programmes and policies, supervising document checks and seat allocation, and supporting transition to induction.

## 12 Stewardship of institutional resources

FINANCE · PROCUREMENT · LIBRARY

Contributed to transparent procurement, equipment acquisition, budget review and the development of the institute’s information resources.

### Accountable procurement

Chaired the Junior Purchase, Budget Review, furniture-procurement and Indent Review Committees; initiated e-procurement aligned with Department of Space norms. The Junior Purchase Committee remit included approval authority up to ₹1 crore.

### Capital & equipment review

Served on the Senior Purchase Committee and Need Aspect Apex Committee, supporting review of infrastructure and major equipment requirements.

### Library development

As Library Committee Chair, guided development in line with academic and research priorities; reviewed acquisition of books, journals, databases and digital resources against faculty and student needs; strengthened digital access and research support; and reviewed policies, subscriptions, budgets and resource utilisation with departments.

### Committee responsibilities recorded

Chairman - Junior Purchase Committee

Chairman - Budget Review Committee

Chairman - Furniture Procurement Committee

Chairman - Indent Review Committee

Member - Senior Purchase Committee

Member - Need Aspect Apex Committee

## 13 Establishing academic traditions

CONVOCATION COMMITTEE · 2011-2025

Chaired the planning and execution of IIST’s convocations, helping shape the public academic traditions of the growing institute.

### The first convocation

Contributed to the design of the first convocation dress and degree certificates. In the absence of a dedicated convocation hall, identified and arranged external venues, including Srinivasan Memorial Hall and Pearl Jubilee Auditorium.

### Institutional protocol

Coordinated invitations to chief guests and dignitaries, academic scheduling and institutional protocol. Constituted and coordinated faculty-staff subcommittees for logistics, seating, programme coordination, hospitality, media and stage management; supervised preparation and conduct; and reviewed each ceremony to improve subsequent editions.

### National academic occasions

The professional account records a convocation attended by Shri Jagdeep Dhankhar as Vice President of India, alongside the wider series of ceremonies conducted under the committee's leadership.

## 14 Sustaining a responsible campus

HEALTH · ETHICS · PUBLIC RESPONSIBILITY

Held responsibilities for continuity during the pandemic, environmental stewardship, ethical research and public engagement.

### Pandemic response & continuity

Chaired the COVID Implementation Committee, coordinating safety protocols and adherence to government and institutional guidance across academic, residential and administrative units. Oversaw inspections, surveillance and compliance processes, reviewed violations and corrective measures, coordinated attendance, health and movement monitoring, and submitted periodic reports to the Director. Worked with departments, residences and support staff on preparedness and students' safe return.

### Swachh Bharat on campus

Led cleanliness and sanitation initiatives, regular drives and awareness activities involving students, faculty and staff. Coordinated with administration and service providers on waste collection, disposal systems and sanitation infrastructure, with continuing monitoring and review.

### Environmental responsibility beyond the campus

Initiated outreach on sanitation, waste segregation and environmental responsibility in neighbouring communities. Coordinated student volunteers in villages and schools and encouraged community participation in clean public spaces.

### Campus service standards

Chaired the Cafeteria Contract Finalization Committee, developing and finalising operational guidelines informed by good practice in higher education institutions.

### Research ethics

As an Institutional Ethics Committee member, reviewed research involving human participants, with attention to scientific integrity and ethical compliance.

### Medical support & academic deputation

Served on the Medical Services Committee, reviewing student medical-support arrangements in line with AICTE/UGC guidance. On the Foreign Deputation Review Committee, evaluated faculty proposals according to academic merit and conference standards.

### Azadi Ka Amrit Mahotsav · 2022

Chaired institute-wide commemorations of India's seventy-five years of Independence, coordinating academic, cultural, outreach and national-themed programmes.

Collective institution-building roles are attributed as support, leadership or coordination according to the supplied record. Plans and committee recommendations are not described as implemented outcomes.

ACADEMIC RECORD / 05

# Teaching, mentorship & supervision

## Postgraduate courses

### CHM872 - Fundamentals of Polymer Science

Odd semester | Theory

### CHM621 - Processing & Design of Materials

Even semester | Theory

### CHM623 - Composite Science & Technology

Even semester | Theory

### CHM641 - Composite and Processing Lab

Even semester | Laboratory

### CHM874 - Rubber Technology

Postgraduate elective | Theory

## Wider teaching and curriculum development

Materials Science | Undergraduate

Polymer Chemistry | Undergraduate

Statistical Thermodynamics | Undergraduate & postgraduate

Analytical Chemistry | Postgraduate

His academic contributions include the development of Chemistry curricula for undergraduate and postgraduate programmes, and the introduction of the Composite and Processing Lab course.

Materials Science, Fundamentals of Polymer Science, Composite Science and Technology, and Processing and Design of Materials feature in the long-term teaching record, including course design and periodic revision. This work forms part of a teaching career spanning more than three decades.

He has continued teaching BTech, MTech and doctoral coursework alongside senior administrative responsibilities, and has organised industrial visits to connect materials science with processing technologies and industrial practice.

## Research supervision

Career total: 22 doctoral graduates supervised. The selected programme directory below contains 28 doctoral records, 28 master’s records and two postdoctoral records, at the source-record stages shown. It does not identify all 22 graduates individually and is not a current enrolment census.

## Postdoctoral programme - 2 selected records

### 01 Vidya Raj

Listed researcher

Research topic: Development of electroactive polymers

### 02 Roymon Joseph

Listed researcher

The University of Calicut records his IIST appointment as Principal Investigator (SERB-DST Young Scientist), July 2016-July 2019. The IIST roster lists him under its postdoctoral programme.

Supporting institutional record

## Doctoral programme - 28 selected records

### 01 P. V. Joseph

Degree awarded

Research topic: Studies on sisal-fibre-reinforced polypropylene composites

### 02 Aby Santhosh Aprem

Degree awarded

Research topic: Influence of binary accelerators on natural rubber vulcanisates

### 03 Ranimol Stephen

Degree awarded

Research topic: Properties of natural rubber, carboxylated styrene-butadiene rubber latices and their blends with micro- and nanofillers

### 04 Maries Idicula

Degree awarded

Research topic: Sisal/banana hybrid woven-fabric-reinforced polymer composites

### 05 Aju C Joseph

Degree awarded

Research topic: Crystallisation, morphology and ultimate properties of polypropylene-based thermoplastic elastomers

### 06 Sherly Annie Paul

Degree awarded

Research topic: Banana-fibre-reinforced polypropylene commingled composites

### 07 Jesmy Jose

Degree awarded

Research topic: Reaction-induced phase separation of epoxy/styrene-co-acrylonitrile blends: morphology, structure and properties

### 08 Shaji Joseph

Degree awarded

Research topic: Oil-palm-fibre-reinforced rubber composites

### 09 P. C. Thomas

Degree awarded

Research topic: Natural-rubber-based polymer nanocomposites

### 10 Tom Lal Jose

Degree awarded

Research topic: Commingled polymer composite systems

### 11 M. Kannan

Degree awarded

Research topic: Thermoplastic-polyurethane-based blends

### 12 K. Jayanarayanan

Degree awarded

Research topic: Polymer microfibrillar composites

### 13 Saritha A

Degree awarded

Research topic: Advanced polymer nanocomposites from halobutyl rubber

### 14 Gejo George

Degree awarded

Research topic: Processing and characterisation of novel bio-commingled composites

### 15 Henna Maria

Degree awarded

Research topic: Effect of nanofillers on incompatible polymer blends

### 16 Raneesh Konnola

Degree awarded

Research topic: Toughened epoxy nanocomposites based on surface-engineered nanofillers

### 17 Meegle S Mathew

Degree awarded

IIST doctoral thesis catalogue, 2019: Synthesis and Characterization of Protein Templated Multifunctional Noble Metal Quantum Clusters for Biomedical Applications.

Supporting institutional record

### 18 Devi Renuka

Degree awarded

### 19 B. D. S. Deeraj

Degree awarded

Thesis submitted November 2022: Studies on Mechanical Performance and Electromagnetic Shielding Effectiveness of Electrospun Fiber/Epoxy Composites. Thesis names Prof. Kuruvilla Joseph as supervisor.

Supporting institutional record

### 20 Risha Raju

Degree awarded

Co-supervised with Prof. Salih A. Thesis defended 23 June 2023: Experimental Studies of Selective Catalytic Reduction of NOx with NH3 on Cu-ZSM-5 Foam Catalysts.

Supporting institutional record

### 21 Sasila C

Ongoing in source record

Research topic: Polymer aerogels

IIST’s doctoral researcher directory lists Chemistry, admission year 2021, with Kuruvilla Joseph as supervisor. Completion status has not been independently confirmed.

Supporting institutional record

### 22 Rhiya Paul

Ongoing in source record

Research topic: Bio-derived reprocessable epoxy thermosets and composites

### 23 Ravi Shankar P M

Ongoing in source record

### 24 Ashmi A

Ongoing in source record

### 25 A S Sankeerthana

Ongoing in source record

### 26 Bini Varghese

Ongoing in source record

### 27 Rageeth Krishnan R

Ongoing in source record

### 28 C H Devi Vara Prasad

Ongoing in source record

## Master’s programme - 28 selected records

### 01 Babu K Koshy

Degree awarded

Research topic: Double networks in natural rubber under efficient and semi-efficient vulcanisation systems

**02 Beena Kuriakose**

Degree awarded

Research topic: Human-hair-reinforced low-density polyethylene composites

**03 M. P. Lalu**

Degree awarded

Research topic: Polypropylene/wood-flour and polypropylene/natural-rubber-latex-waste composites

**04 Mayalekshmi R**

Degree awarded

Research topic: Sisal-microfibril-reinforced LLDPE composites

**05 Mayalekshmi**

Degree awarded

Research topic: Short sisal fibres and sisal microfibrils in LLDPE composites

**06 Annie Thomas**

Degree awarded

Research topic: Paper pulp as reinforcement in rubber composites

**07 Thomas V Mathew**

Degree awarded

Research topic: Waste lignin as reinforcement in rubber vulcanisates

**08 Sindhu K**

Degree awarded

Research topic: Environmental effects on the physical and chemical properties of coir/polyester and glass-fibre/polyester composites

**09 Tono Fernandes**

Degree awarded

Research topic: Starch-based coir-fibre biocomposites

**10 Sowmya S Nair**

Degree awarded

Research topic: Cellulosic microfibrils from banana fibres and environmentally friendly starch-based green composites

**11 Brijit K S**

Degree awarded

Research topic: Salvinia molesta microfibrils as a raw material for polymer and paper applications

**12 Jacob George**

Degree awarded

**13 Hanna J Maria**

Degree awarded

Research topic: Mechanical and thermal properties of PHB/natural-fibre composites

**14 Rathish R**

Degree awarded

Research topic: Polyhydroxybutyrate-based micro- and nano-green composites

**15 Veena P**

Degree awarded

Research topic: Polyhydroxybutyrate biocomposites reinforced with bamboo microfibrils

**16 Smitha C Sukumaran**

Degree awarded

Research topic: Acrylic polymers: synthesis, characterisation and crosslinking through click chemistry

**17 Jassy Sam**

Degree awarded

Research topic: Epoxy/carbon-nanotube composites

**18 Saravanan**

Degree awarded

Research topic: Melamine-foam composites for acoustic insulation of composite heat shields and crew modules in the Human Space Programme

**19 Revishankar P. M.**

Degree awarded

Research topic: HTPB-based nanocomposites for solid-propellant applications

**20 Raghavendrakumar**

Degree awarded

Research topic: Polymer/polymer microfibrillar nanocomposites based on PP/PET/CNT systems

**21 B. D. S. Deeraj**

Degree awarded

Research topic: High-performance in-situ polymer/polymer microfibrillar composites based on PP/Nylon 6 blends

**22 Bharathy**

Degree awarded

Research topic: High-performance phenolic-based ablative composites for space applications

**23 Bony Thomas**

Degree awarded

Research topic: Preparation and characterisation of nanofibre-reinforced nitrile rubber composites

### 24 Fathima S

Ongoing in source record

Research topic: Carbonaceous fillers derived from coir-pith lignin

### 25 K. Jayanarayanan

Degree awarded

Research topic: Microfibrillar composites

### 26 Simulu Kunjoonju

Degree awarded

Research topic: Short-sisal-fibre-reinforced NBR composites

### 27 More Kirit Pradeep

Status not specified

Research topic: Manufacturing-induced deformation in carbon/epoxy composites: experimental validation of a model

### 28 Karthika Menon

Thesis submitted · September 2026 record

Research topic: Synthesis and characterisation of PVDF-based carbon nanofibres

ACADEMIC RECORD / 06

# Honours & research fellowships

## Research recognition

### World’s Top 2% Scientists

2026

Stanford University / Elsevier citation-impact recognition in both career-long and single-year data for the last six years.

### Most Cited Researchers in Materials Science and Engineering

2016

Elsevier / Scopus

### Top-cited article recognition

2020-2021

Wiley recognised a co-authored article in Polymer Engineering and Science as a top-cited article for 2020-2021.

### AD Scientific Index · India

2022

Ranked 336 among Indian researchers across all subjects in the 2022 AD Scientific Index, based on h-index and citations. A historical ranking documented in the institutional faculty record.

## Professional fellowships

### Honorary Fellow

2023

Indian Society of Analytical Scientists (ISAS)

### Fellow of the Astronautical Society of India

2022

FASI

### Fellow of the Royal Society of Chemistry

2020

FRSC, London

## Early-career and teaching awards

### Prof. Sivaprasad Award

2000

Sivaprasad Foundation, Kollam.

Best College Teachers in Kerala

### Young Scientist Award

2000

Indian Science Congress Association, New Delhi. Received by the research group.

### Mathias Award

1995

All India Association of Christian Higher Education (AIACHE), New Delhi.

Recognition for innovative young college teachers

### Highest Certificate of Merit

1994

Indian Science Congress Association, New Delhi

Excellence in research

### Young Scientist Award

1993

Government of Kerala, India

## Further professional recognition

### Invitation to the President’s At Home reception

2025

Attended the Independence Day reception at Rashtrapati Bhavan on 15 August 2025.

## Research fellowships and associateships

### Linnaeus-Palme Visiting Scientist Fellowship

2006

Sweden

### DST-DAAD Visiting Scientist Fellowship

2002-2004

India-Germany research exchange; Martin Luther University Halle-Wittenberg

### SICOMP Visiting Researcher Fellowship

April-June 2001

Swedish Institute of Composites, Sweden

### CNPq Visiting Professor Fellowship

1998-1999

National Council for Scientific and Technological Development, Brazil

### INSA Visiting Researcher Fellowship

1996-1997

Indian National Science Academy, New Delhi

### CSIR Research Associateship

1994-1996

Council of Scientific and Industrial Research, India

### CSIR Senior Research Fellowship

1992-1993

Council of Scientific and Industrial Research, India

### Junior Research Fellowship

1989-1992

Mahatma Gandhi University

ACADEMIC RECORD / 07

# Academic service & professional memberships

The following records describe career service. Undated entries do not imply current tenure. Advisor appointments at IIT Kharagpur and Christ University are listed first, as in the public service record.

**Advisor**

Indian Institute of Technology Kharagpur (IIT Kharagpur)

**Advisor**

Christ University, Bengaluru

**Member, Governing Body**

Assumption College (Autonomous), Changanassery

**Member, Governing Body**

Mar Athanasius College (Autonomous), Kothamangalam

**Former member, Syndicate**

Mahatma Gandhi University, Kottayam

**Former member, Senate**

Mahatma Gandhi University, Kottayam

**Former member, Academic Council**

Mahatma Gandhi University, Kottayam

**Member, Academic Committee**

Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram

**Member, Academic Council**

Mar Athanasius College (Autonomous), Kothamangalam

**Member, Academic Council**

St. Berchmans’ College (Autonomous), Changanassery

**Member, Academic Council**

Kuriakose Elias College, Mannanam

**External expert, Board of Studies in Chemistry**

St. Thomas College (Autonomous), Palai

**External expert in Chemistry, Research Advisory Council**

Mar Ivanios College (Autonomous), Thiruvananthapuram

**Former member, Internal Quality Assurance Cell (IQAC)**

Mar Ivanios College (Autonomous), Thiruvananthapuram

**Member, Quality Assurance Cell (QAC)**

St. Berchmans' College (Autonomous), Changanassery

**Member, Board of Studies in Polymer Science & Technology, including postgraduate studies**

University of Kerala

**Member, Board of Studies in Nanoscience and Nanotechnology, including postgraduate studies**

University of Kerala

**Member, Facility Management Committee, DST-SAIF**

Mahatma Gandhi University, Kottayam

**Task Force member**

Government of Kerala initiative on the ban of single-use plastics

**Former President; former Executive Committee member**

Society for Polymer Science, India (SPSI), Thiruvananthapuram Chapter

**Former Chairman (two terms; 2017-2020 among the documented periods)**

Materials Research Society of India, Thiruvananthapuram Chapter

**Former Chairman, APEX Resource Group**

Sasthraposhini scheme, Kerala State Council for Science, Technology and Environment

**Former Executive Committee member**

Indian Society for the Advancement of Materials and Process Engineering, Thiruvananthapuram Chapter

**Member, Governing Body**

St. Berchmans' College (Autonomous), Changanassery

**Former member, Academic Council**

Mar Ivanios College (Autonomous), Thiruvananthapuram

**Former member, Board of Studies**

Mar Ivanios College (Autonomous), Thiruvananthapuram

**Former Executive Committee member**

Advanced Molecular Materials Research Centre (AMMRC), Mahatma Gandhi University

## Membership of professional bodies

- Indian Association of Chemistry Teachers
- High Energy Materials Society of India
- Kerala Academy of Science

- Mahatma Gandhi University Chemical Society
- Indian Science Congress Association
- Indian Society for Advancement of Materials and Process Engineering (ISAMPE)
- Society for Polymer Science, India (SPSI)
- Indian Society of Analytical Scientists

Fellowships and society leadership appointments are recorded in their respective sections; these membership entries are not additional fellowship awards.

## Science education and outreach

Public engagement with science forms part of his wider academic contribution. This includes school-level science education, the IIST@Schools programme and the Science Aptitude Developer Programme.

His service with the Sasthraposhini scheme of KSCSTE and the Science Education Trust connects research expertise with science education beyond the university.

ACADEMIC RECORD / 08

# Edited books

Ten edited reference volumes. Publisher dates and identifiers follow the verified public book catalogue.

## 01 Green Nanomaterials for Energy and Environment: Protocols and Applications

Woodhead Publishing / Elsevier | 2026

Editors: Kuruvilla Joseph, Manju Kurian and Meegle S. Mathew

ISBN: 978-0-443-33164-0

Publisher record

## 02 PEEK Blends and Composites: Synthesis, Processing, and Applications

Elsevier | 2025

Editors: Kuruvilla Joseph, Suryasarathi Bose, Saritha Appukuttan and Battula Durga Siva Deeraj

Publisher record

## 03 Zero-Dimensional Carbon Nanomaterials: Material Design Methods, Properties and Applications

Woodhead Publishing / Elsevier | 2023

Editors: Kuruvilla Joseph, Runcy Wilson, George Gejo and Saritha Appukuttan

Publisher record

## 04 Lignin-based Materials: Health Care and Medical Applications

Royal Society of Chemistry | 2023

Editors: Kuruvilla Joseph, Runcy Wilson, Gejo George and Saritha Appukuttan

Publisher record

## 05 Luminescent Metal Nanoclusters: Synthesis, Characterization, and Applications

Woodhead Publishing / Elsevier | 2022

Editors: Sabu Thomas, Kuruvilla Joseph, Saritha Appukuttan and Meegle S. Mathew

Publisher record

## 06 Fiber Reinforced Composites: Constituents, Compatibility, Perspectives and Applications

Woodhead Publishing / Elsevier | 2021

Editors: Kuruvilla Joseph, Kristiina Oksman, Gejo George, Runcy Wilson and Saritha Appukuttan

Publisher record

## 07 Materials for Potential EMI Shielding Applications: Processing, Properties and Current Trends

Elsevier | 2019

Editors: Kuruvilla Joseph, Runcy Wilson and George Gejo

Publisher record

## 08 Polymer Composites: Volume 3: Biocomposites

Wiley-VCH | 2014

Editors: Sabu Thomas, Kuruvilla Joseph, S. K. Malhotra, Koichi Goda and M. S. Sreekala

Publisher record

## 09 Polymer Composites: Volume 2: Nanocomposites

Wiley-VCH | 2013

Editors: Sabu Thomas, Kuruvilla Joseph, S. K. Malhotra, Koichi Goda and M. S. Sreekala

Publisher record

## 10 Polymer Composites: Volume 1: Macro- and Microcomposites

Wiley-VCH | 2012

Editors: Sabu Thomas, Kuruvilla Joseph, S. K. Malhotra, Koichi Goda and M. S. Sreekala

Publisher record

ACADEMIC RECORD / 09

# Granted patents

Three Indian patents. Research summaries describe sensing approaches; they do not establish clinical approval or deployment.

## Fructose Specific Binding Nanoparticle

Indian Patent No. 344459 | Granted 19 August 2020

Application: 4962/CHE/2013 | Filed 1 November 2013

A functional nanoparticle system for selective fructose recognition by colour change, developed as an alternative to instrument-intensive detection methods.

## Nanoparticles Functionalized with Cholesterol Specific Binding Agents

Indian Patent No. 350517 | Granted 29 October 2020

Tomatine-functionalised gold nanoparticles for selective, enzyme-free cholesterol detection, with research evaluation in human serum.

## Gluten Protected Gold Quantum Cluster as a Creatinine Sensor

Indian Patent No. 372438 | Granted 6 August 2021

Application: 201741000489

Wheat-gluten-protected fluorescent gold quantum clusters developed for turn-on creatinine sensing, with stability studied in reactive oxygen species and hydrogen peroxide.

ACADEMIC RECORD / 10

# Journal articles & reviews

228 individually catalogued records: 215 journal articles and 13 reviews, 1992-2026. The wider career summary reports 250+ journal papers; this list reproduces the documented website catalogue and does not claim to reconcile that full total. Book chapters are separated in the next section.

## 2026

**J001** Madhusudhana M. Devadiga, Anushree S. Bhat, Subham Sarangi, Magdalena Osial, Kuruvilla Joseph, Sunday J. Olusegun, Jagdeep Singh, Nannan Wang, Luiz A. Ribeiro Junior, Santosh K. Tiwari (2026). Describing critical barriers in commercial deployment of CO 2 capture and utilization technologies. Energy & Environmental Science 19 (3), 743-790. https://doi.org/10.1039/d6ee00134c

DOI: 10.1039/d6ee00134c

**J002** Sasila Chellan, Rajvihar Sivaraman Nair Rajeev, Kuruvilla Joseph (2026). Multifunctional Polyimide/Carbon Nanofiber Composite Aerogels for Electromagnetic Interference Shielding, Thermal Insulation, and Joule Heating. ACS Applied Nano Materials 9 (36), 17231-17243. https://doi.org/10.1021/acsanm.6c03424

DOI: 10.1021/acsanm.6c03424

## 2025

**J003** A. Vindhyasarumi, Appukuttan Saritha, A. S. Sethulekshmi, Kuruvilla Joseph (2025). Advancements in carbon microsphere-based nanocomposites: synthesis, properties and multifaceted applications: a comprehensive review. Carbon Letters 35 (2), 387-416. https://doi.org/10.1007/s42823-024-00851-w

DOI: 10.1007/s42823-024-00851-w

**J004** Gopika Venu, Jitha S. Jayan, Akhila Raman, V. R. Aju, B. D. S. Deeraj, Kuruvilla Joseph, Appukuttan Saritha (2025). Analysis of the Effect of Nano-Inclusion of Polyethylene Glycol Exfoliated Transition Metal Dichalcogenides in Epoxy Toughening. Polymer Composites 46 (18), 16967-16977. https://doi.org/10.1002/pc.70088

DOI: 10.1002/pc.70088

**J005** Sasila Chellan, Smitha Chakithara Sukumaran, Rajvihar Sivaraman Nair Rajeev, Kuruvilla Joseph (2025). Anisotropic, Multifunctional GNP/BaTiO3/PI Composite Aerogels for Absorption-Dominant EMI Shielding and Thermal Insulation Applications. ACS Applied Engineering Materials 3 (12), 4321-4336. https://doi.org/10.1021/acsaenm.5c00564

DOI: 10.1021/acsaenm.5c00564

**J006** Anju Paul, Ann Mary Tomy, Kuruvilla Joseph, Beena Mathew, Manju Kurian (2025). Carbon dot integrated cerium tungstate nanocomposites for photocatalytic degradation and sensing applications. Journal of Alloys and Compounds 1026, 180253. https://doi.org/10.1016/j.jallcom.2025.180253

DOI: 10.1016/j.jallcom.2025.180253

**J007** Akhila Raman, Jitha S. Jayan, B. D. S. Deeraj, Manju Srivastava, Kuruvilla Joseph, Appukuttan Saritha (2025). Delamination of MXene using biomolecule: An effective strategy toward the utilization of delaminated MXene as fillers in polymer composites. Polymer Composites 46 (4), 3193-3207. https://doi.org/10.1002/pc.29163

DOI: 10.1002/pc.29163

**J008** Arjun Somarajan, Rhiya Paul, Kuruvilla Joseph (2025). Development of Flexible Hydrophobic Polypropylene/SPCB/GNP Hybrid Nanocomposite Films With Excellent EMI Shielding and Mechanical Properties. Journal of Polymer Science 63 (2), 307-323. https://doi.org/10.1002/pol.20240350

DOI: 10.1002/pol.20240350

**J009** Akhila Raman, Jitha S Jayan, Vinay Deep Punetha, BDS Deeraj, Suryasarathi Bose, Kuruvilla Joseph, Appukuttan Saritha (2025). Exploring the potential of bioepoxy/graphene nanoplatelet composites as advanced shape memory materials. Materials Research Bulletin 192, 113619. https://doi.org/10.1016/j.materresbull.2025.113619

DOI: 10.1016/j.materresbull.2025.113619

**J010** Anandavally Sabarisadanam Sethulekshmi, Kuruvilla Joseph, Abi Santhosh Aprem, Suja Bhargavan Sisupal, Vinay Deep Punetha, Appukuttan Saritha (2025). Green synthesis of tannic acid-modified tungsten disulfide nanosheets: a cost effective pathway towards tailoring the properties of natural rubber. Tungsten 7 (3), 631-644. https://doi.org/10.1007/s42864-025-00328-x

DOI: 10.1007/s42864-025-00328-x

**J011** A.S. Sethulekshmi, Selvakumar Gopalsamy, B.D.S. Deeraj, Kuruvilla Joseph, Abi Santhosh Aprem, Suja Bhargavan Sisupal, Febin P. Jacob, Vinay Deep Punetha, Rakshit Pathak, Appukuttan Saritha (2025). Polyester/cotton blended fabrics coated with natural rubber latex containing lignin nanoparticles and molybdenum disulfide nanosheets for medical and protective applications. International Journal of Biological Macromolecules 318, 144878. https://doi.org/10.1016/j.ijbiomac.2025.144878

DOI: 10.1016/j.ijbiomac.2025.144878

**J012** Asok Aparna, Jitha S Jayan, Rani Alphonsa Jose, Kuruvilla Joseph, Appukuttan Saritha (2025). Robust shape memory chlorobutyl rubber/boron nitride polymer nanocomposites for oil-water separation application. Journal of the Taiwan Institute of Chemical Engineers 166, 105623. https://doi.org/10.1016/j.jtice.2024.105623

DOI: 10.1016/j.jtice.2024.105623

## 2024

**J013** B. D. S. Deeraj, Rhiya Paul, Kuruvilla Joseph (2024). A brief review on electrospun polymer derived carbon fibers for EMI shielding applications. Functional Composite Materials 5 (1). https://doi.org/10.1186/s42252-024-00060-8

DOI: 10.1186/s42252-024-00060-8

**J014** A.S. Sethulekshmi, Febin P. Jacob, Kuruvilla Joseph, Abi Santhosh Aprem, Suja Bhargavan Sisupal, Appukuttan Saritha (2024). Biomaterials assisted 2D materials exfoliation: Reinforcing agents for polymer matrices. European Polymer Journal 210, 112943. https://doi.org/10.1016/j.eurpolymj.2024.112943

DOI: 10.1016/j.eurpolymj.2024.112943

**J015** Jitha S. Jayan, BDS Deeraj, Kuruvilla Joseph, Appukuttan Saritha (2024). Designed and tailor-made double hydrophilic block copolymer-graphene nanoplatelet hybrids for reinforcing epoxy thermosets. Scientific Reports 14 (1). https://doi.org/10.1038/s41598-024-59322-x

DOI: 10.1038/s41598-024-59322-x

**J016** Asok Aparna, S.D. Abhirami, A.S. Sethulekshmi, Jitha S. Jayan, Appukuttan Saritha, Rani Alphonsa Jose, Kuruvilla Joseph (2024). Effective role of tannic acid in the fabrication of hydrophobic, oleophilic, antibacterial, boron nitride/chlorobutyl rubber nanocomposite for reusable protective clothing and oil-water separation. International Journal of Biological Macromolecules 263, 130341. https://doi.org/10.1016/j.ijbiomac.2024.130341

DOI: 10.1016/j.ijbiomac.2024.130341

**J017** Risha Raju, Prabhakaran K., Kuruvilla Joseph, A. Salih (2024). Experimental investigation of mass transfer and pressure drop in NH 3 SCR over self-supporting Cu-ZSM-5 foam. Reaction Chemistry & Engineering 9 (8), 2120-2134. https://doi.org/10.1039/d3re00533j

DOI: 10.1039/d3re00533j

**J018** A.S. Sethulekshmi, Kuruvilla Joseph, Abi Santhosh Aprem, Suja Bhargavan Sisupal, Appukuttan Saritha (2024). Green synthesis of multifunctional natural rubber-lignin nanocomposites: A sustainable approach for waste reduction. International Journal of Biological Macromolecules 280, 135887. https://doi.org/10.1016/j.ijbiomac.2024.135887

DOI: 10.1016/j.ijbiomac.2024.135887

**J019** Kartikey Sharma, Ravi Ranjan Kumar, S. Dinesh Raj, Sushant K. Manwatkar, Kuruvilla Joseph, S.V.S. Narayana Murty (2024). Mechanical properties of laser powder bed fusion processed Inconel alloy IN718 in different heat treatment conditions through small scale specimen testing. Theoretical and Applied Fracture Mechanics 134, 104756. https://doi.org/10.1016/j.tafmec.2024.104756

DOI: 10.1016/j.tafmec.2024.104756

**J020** Gopika Venu, Jitha S. Jayan, Kuruvilla Joseph, Appukuttan Saritha (2024). Polyvinyl pyrrolidone mediated exfoliation of transition metal dichalcogenides: Comparative evaluation of exfoliated MoS 2 and WS 2 in epoxy toughening. Polymer Composites 45 (10), 9561-9572. https://doi.org/10.1002/pc.28427

DOI: 10.1002/pc.28427

**J021** Ramya Rajan, D. Jayadev, K. P. Anjali, Saran S. Kumar, Aparna Asok, Jitha S. Jayan, Bejoy Francis, Appukuttan Saritha, Kuruvilla Joseph (2024). Preparation of Poly (styrene-methyl acrylate) Reinforced on Ag-rGO Nanocomposite under Photocatalytic conditions and its use as a hybrid filler for reinforcement of Epoxy Resin. Topics in Catalysis 67 (9), 636-649. https://doi.org/10.1007/s11244-023-01872-x

DOI: 10.1007/s11244-023-01872-x

**J022** Jitha S. Jayan, Appukuttan Saritha, B. D. S. Deeraj, Kuruvilla Joseph (2024). Role of Polyethylene Glycol as a Catalyst and a Filler in Epoxy Systems. Topics in Catalysis 67 (1-4), 218-231. https://doi.org/10.1007/s11244-023-01859-8

DOI: 10.1007/s11244-023-01859-8

**J023** Ramya Rajan, D. Jayadev, Aiswarya Ambili Suresh, Akhila Raman, Gopika Venu, Jitha S. Jayan, Bejoy Francis, Appukuttan Saritha, Kuruvila Joseph (2024). The role of photo-catalytically synthesized poly (N-vinyl pyrrolidone-methyl methacrylate)/CuO-rGO nanocomposite as a filler for the reinforcement for epoxy system. Polymer Composites 45 (8), 7470-7483. https://doi.org/10.1002/pc.28279

DOI: 10.1002/pc.28279

## 2023

**J024** Venu Gopika, jitha s jayan, saritha Appukuttan, Kuruvilla Joseph (2023). A Comparative Analysis of Polyvinyl Pyrrolidone Exfoliated Metal Dichalcogenides in Tuning the Properties of Epoxy Composites. Kuruvilla, A Comparative Analysis of Polyvinyl Pyrrolidone Exfoliated Metal …. https://doi.org/10.2139/ssrn.4674666

DOI: 10.2139/ssrn.4674666

**J025** B.D.S Deeraj, Jitha S Jayan, Akhila Raman, Aparna Asok, Rhiya Paul, Appukuttan Saritha, Kuruvilla Joseph (2023). A comprehensive review of recent developments in metal-organic framework/polymer composites and their applications. Surfaces and Interfaces 43, 103574. https://doi.org/10.1016/j.surfin.2023.103574

DOI: 10.1016/j.surfin.2023.103574

**J026** A. Vindhyasarumi, K.P. Anjali, A.S. Sethulekshmi, Jitha S Jayan, BDS Deeraj, Appukuttan Saritha, Kuruvilla Joseph (2023). A comprehensive review on recent progress in carbon nano-onion based polymer nanocomposites. European Polymer Journal 194, 112143. https://doi.org/10.1016/j.eurpolymj.2023.112143

DOI: 10.1016/j.eurpolymj.2023.112143

**J027** Jitha S. Jayan, Appukuttan Saritha, B. D. S Deeraj, Kuruvilla Joseph (2023). Amphiphilic Block Copolymer Grafted Multiwalled Carbon Nanotube Based Hierarchical Nanohybrids for Effective Epoxy Toughening. ACS Applied Engineering Materials 1 (6), 1602-1614. https://doi.org/10.1021/acsaenm.3c00135

DOI: 10.1021/acsaenm.3c00135

**J028** A.S. Sethulekshmi, Appukuttan Saritha, Kuruvilla Joseph, Abi Santhosh Aprem, Suja Bhargavan Sisupal, Vidhu S Nair, Sidharth G (2023). Multifunctional role of tannic acid in improving the mechanical, thermal and antimicrobial properties of natural rubber-molybdenum disulfide nanocomposites. International Journal of Biological Macromolecules 225, 351-360. https://doi.org/10.1016/j.ijbiomac.2022.11.054

DOI: 10.1016/j.ijbiomac.2022.11.054

**J029** B.D.S. Deeraj, Jitha S. Jayan, Akhila Raman, Appukuttan Saritha, Kuruvilla Joseph (2023). Recent prospects and trends on zeolitic imidazolate frameworks for microwave absorption and EMI shielding applications. Synthetic Metals 296, 117354. https://doi.org/10.1016/j.synthmet.2023.117354

DOI: 10.1016/j.synthmet.2023.117354

**J030** A.S. Sethulekshmi, Appukuttan Saritha, Kuruvilla Joseph, Abi Santhosh Aprem, Suja Bhargavan Sisupal, G Sidharth, Vidhu S Nair (2023). Tannic acid as a green exfoliating agent: a sustainable pathway towards the development of natural rubber-molybdenum disulfide nanocomposites. Industrial Crops and Products 192, 115978. https://doi.org/10.1016/j.indcrop.2022.115978

DOI: 10.1016/j.indcrop.2022.115978

## 2022

**J031** A.S. Sethulekshmi, Appukuttan Saritha, Kuruvilla Joseph (2022). A comprehensive review on the recent advancements in natural rubber nanocomposites. International Journal of Biological Macromolecules 194, 819-842. https://doi.org/10.1016/j.ijbiomac.2021.11.134

DOI: 10.1016/j.ijbiomac.2021.11.134

**J032** Varsha Lisa John, Francis Joy, Amy Jose Kollannoor, Kuruvilla Joseph, Yamuna Nair, Vinod T. P. (2022). Amine functionalized carbon quantum dots from paper precursors for selective binding and fluorescent labelling applications. Journal of Colloid and Interface Science 617, 730-744. https://doi.org/10.1016/j.jcis.2022.03.070

DOI: 10.1016/j.jcis.2022.03.070

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ACADEMIC RECORD / 11

# Book chapters

56 individually catalogued chapters. These contributions are separated from journal articles and from the ten edited books to avoid double counting.

## 2026

**C001** Raghvendra Kumar Mishra, Kuruvilla Joseph, Saurav Goel (2026). PVC-Nanocellulose Biocomposites and Nanocomposites. Polyvinyl Chloride-Based Biocomposites and Bionanocomposites 185-232. https://doi.org/10.1002/9781394214983.ch7

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**C018** Jitha S. Jayan, A.S. Sethulekshmi, Saritha Appukuttan, Kuruvilla Joseph (2022). Electrical and dielectric properties of nanoparticles-based polymer composites. Nanoparticle-Based Polymer Composites 197-218. https://doi.org/10.1016/b978-0-12-824272-8.00011-7

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**C025** Ansu Mary Alex, Meegle S. Mathew, Kitty Joseph Kuruvilla, Saritha Appukuttan, Kuruvilla Joseph, Sabu Thomas (2022). Protein and enzyme protected metal nanoclusters. Luminescent Metal Nanoclusters 303-348. https://doi.org/10.1016/b978-0-323-88657-4.00020-x

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**C028** Jitha S. Jayan, Saritha Appukuttan, Runcy Wilson, Kuruvilla Joseph, Gejo George, Kristiina Oksman (2021). An introduction to fiber reinforced composite materials. Fiber Reinforced Composites 1-24. https://doi.org/10.1016/b978-0-12-821090-1.00025-9

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**C029** Jitha S. Jayan, B.D.S. Deeraj, Appukuttan Saritha, Kuruvilla Joseph (2021). Biopolymer-derived carbonaceous composites and their potential applications. Hybrid Natural Fiber Composites 253-280. https://doi.org/10.1016/b978-0-12-819900-8.00005-2

DOI: 10.1016/b978-0-12-819900-8.00005-2

**C030** S. Fathima, B.D.S. Deeraj, Saritha Appukuttan, Kuruvilla Joseph (2021). Carbon fiber and glass fiber reinforced elastomeric composites. Fiber Reinforced Composites 307-340. https://doi.org/10.1016/b978-0-12-821090-1.00005-3

DOI: 10.1016/b978-0-12-821090-1.00005-3

**C031** B.D.S. Deeraj, Jitha S. Jayan, Appukuttan Saritha, Kuruvilla Joseph (2021). Electrospun biopolymer-based hybrid composites. Hybrid Natural Fiber Composites 225-252. https://doi.org/10.1016/b978-0-12-819900-8.00007-6

DOI: 10.1016/b978-0-12-819900-8.00007-6

**C032** Runcy Wilson, Gejo George, P.C. Thomas, Kuruvilla Joseph (2021). Fabrication and characterization of carrageenan-based green materials. Advanced Green Materials 257-277. https://doi.org/10.1016/b978-0-12-819988-6.00012-4

DOI: 10.1016/b978-0-12-819988-6.00012-4

**C033** Runcy Wilson, Gejo George, Tomlal Jose E, Kuruvilla Joseph (2021). Recycling of Synthetic Fibre Reinforced Plastics. Composites Science and Technology Recent Developments in Plastic Recycling 143-168. https://doi.org/10.1007/978-981-16-3627-1_7

DOI: 10.1007/978-981-16-3627-1_7

**C034** Appukuttan Saritha, Battula D.S. Deeraj, Jitha S. Jayan, Kuruvilla Joseph (2021). Rheology of Bioepoxy Polymers, Their Blends, and Composites. Bio-Based Epoxy Polymers, Blends and Composites 167-195. https://doi.org/10.1002/9783527823604.ch5

DOI: 10.1002/9783527823604.ch5

**C035** Jitha S. Jayan, A.S. Sethulekshmi, Gopika Venu, Appukuttan Saritha, Kuruvilla Joseph (2021). Sustainable nanotextiles: emerging antibacterial fabrics. Antimicrobial Textiles from Natural Resources 619-651. https://doi.org/10.1016/b978-0-12-821485-5.00007-x

DOI: 10.1016/b978-0-12-821485-5.00007-x

**C036** Jitha S. Javan, A. S. Sethulekshmi, Gopika Venn, Appukuttan Saritha, Kuruvilla Joseph (2021). Synthesis, Designing and Challenges of Functionalized Polymeric Nanomaterials and Their Spectroscopic Applications. Nanomaterials for Spectroscopic Applications 137-171. https://doi.org/10.1201/9781003160335-5

DOI: 10.1201/9781003160335-5

## 2020

**C037** Runcy Wilson, Gejo George, Kuruvilla Joseph (2020). An introduction to materials for potential EMI shielding applications: Status and future. Materials for Potential EMI Shielding Applications 1-8. https://doi.org/10.1016/b978-0-12-817590-3.00001-4

DOI: 10.1016/b978-0-12-817590-3.00001-4

**C038** Appukuttan Saritha, Bony Thomas, Gejo George, Runcy Wilson, Kuruvilla Joseph (2020). Elastomer-based materials for EMI shielding applications. Materials for Potential EMI Shielding Applications 121-143. https://doi.org/10.1016/b978-0-12-817590-3.00008-7

DOI: 10.1016/b978-0-12-817590-3.00008-7

**C039** Battula Durga Siva Deeraj, Meegle S. Mathew, Jyotishkumar Parameswaranpillai, Kuruvilla Joseph (2020). EMI shielding materials based on thermosetting polymers. Materials for Potential EMI Shielding Applications 101-110. https://doi.org/10.1016/b978-0-12-817590-3.00006-3

DOI: 10.1016/b978-0-12-817590-3.00006-3

**C040** Appukuttan Saritha, Kuruvilla Joseph (2020). Melt rheological properties of layered double hydroxide polymer nanocomposites. Layered Double Hydroxide Polymer Nanocomposites 281-310. https://doi.org/10.1016/b978-0-08-101903-0.00007-6

DOI: 10.1016/b978-0-08-101903-0.00007-6

## 2019

**C041** D. Jayadev, Jitha S. Jayan, Zeena S. Pillai, Kuruvilla Joseph, Appukuttan Saritha (2019). Characterization of superhydrophobic polymer coating. Superhydrophobic Polymer Coatings 91-121. https://doi.org/10.1016/b978-0-12-816671-0.00006-0

DOI: 10.1016/b978-0-12-816671-0.00006-0

**C042** B.D.S. Deeraj, K. Jayanarayanan, Kuruvilla Joseph (2019). Development of High-Performance In-Situ Polypropylene/Nylon 6 Microfibrillar Composites. Processing and Characterization of Multicomponent Polymer Systems 135-154. https://doi.org/10.1201/9780429469794-8

DOI: 10.1201/9780429469794-8

**C043** Jitha S. Jayan, D. Jayadev, Zeena S. Pillai, Kuruvilla Joseph, Appukuttan Saritha (2019). The stability of the superhydrophobic surfaces. Superhydrophobic Polymer Coatings 123-159. https://doi.org/10.1016/b978-0-12-816671-0.00007-2

DOI: 10.1016/b978-0-12-816671-0.00007-2

## 2018

**C044** RK Mishra, MG Thomas, J Abraham, K Joseph, S Thomas (2018). Electromagnetic interference shielding materials for aerospace application: A state of the art. Advanced materials for electromagnetic shielding: fundamentals, properties …. https://doi.org/10.1002/9781119128625.ch15

DOI: 10.1002/9781119128625.ch15

## 2017

**C045** RK Mishra, HJ Maria, K Joseph, S Thomas (2017). Basic structural and properties relationship of recyclable microfibrillar composite materials from immiscible plastics blends: An introduction. Micro and nano fibrillar composites (MFCs and NFCs) from polymer blends, 1-25

**C046** RK Mishra, J Abraham, N Kalarikkal, K Jayanarayanan, K Joseph, et al. (2017). Conducting polyurethane Blends: recent advances and perspectives. Polyurethane Polymers, 203-231

**C047** Raghvendra K. Mishra, Jiji Abraham, Kuruvilla Joseph, Karingamanna Jayanarayanan, Nandakumar Kalarikkal, Sabu Thomas (2017). Conducting Polyurethane Composites. Polyurethane Polymers 365-399. https://doi.org/10.1016/b978-0-12-804065-2.00012-7

DOI: 10.1016/b978-0-12-804065-2.00012-7

**C048** K. Jayanarayanan, R.K. Mishra, K. Joseph, S. Thomas (2017). Preparation, morphology, static and dynamic mechanical properties, and application of polyolefins and poly(ethylene terephthalate) based microfibrillar and nanofibrillar composites. Micro and Nano Fibrillar Composites (MFCs and NFCs) from Polymer Blends 183-211. https://doi.org/10.1016/b978-0-08-101991-7.00008-x

DOI: 10.1016/b978-0-08-101991-7.00008-x

**C049** RK Mishra, J Cherusseri, K Joseph (2017). Thermal and crystallization behavior of micro and nano fibrillar in-situ composites. Micro and nano fibrillar composites (MFCs and NFCs) from polymer blends, 213-231

## 2016

**C050** K. Y. Sandhya, A. Saritha, Kuruvilla Joseph (2016). Liquid Crystalline Polymers from Renewable Resources: Synthesis and Properties. Liquid Crystalline Polymers 273-306. https://doi.org/10.1007/978-3-319-22894-5_9

DOI: 10.1007/978-3-319-22894-5_9

## 2013

**C051** Koichi Goda, Meyyarappallil Sadasivan Sreekala, Sant Kumar Malhotra, Kuruvilla Joseph, Sabu Thomas (2013). Advances in Polymer Composites: Biocomposites-State of the Art, New Challenges, and Opportunities. Polymer Composites 1-10. https://doi.org/10.1002/9783527674220.ch1

DOI: 10.1002/9783527674220.ch1

**C052** Amrita Saritha, Kuruvilla Joseph (2013). Barrier Properties of Nanocomposites. Polymer Composites, Volume 2: Nanocomposites, Chapter 8, 185-200. https://doi.org/10.1002/9783527652372.ch8

DOI: 10.1002/9783527652372.ch8

**C053** Amrita Saritha, Sant Kumar Malhotra, Sabu Thomas, Kuruvilla Joseph, Koichi Goda, Meyyarappallil Sadasivan Sreekala (2013). State of the Art - Nanomechanics. Polymer Composites 1-12. https://doi.org/10.1002/9783527652372.ch1

DOI: 10.1002/9783527652372.ch1

## 2012

**C054** K Jayanarayanan, K Joseph, S Thomas (2012). Microfibrils Reinforced composites based on PP and PET: Effect of draw ratio on morphology, static and dynamic mechanical properties, crystallization and rheology. Synthetic Polymer-Polymer Composites, 525-562

## 2000

**C055** K Joseph, LHC Mattoso, RD Toledo, S Thomas, LH De Carvalho, et al. (2000). Natural fiber reinforced thermoplastic composites. Natural Polymers and Agrofibers Bases Composites. Embrapa Instrumentacao ...

## Year not specified

**C056** JS Jayan, G Venu, SA Sabarisadanam, A Saritha, K Joseph, G George (n.d.). Nano-engineered fibers in polymer matrices. FIBER-REINFORCED POLYMERS, 73

ACADEMIC RECORD / 12

# Selected talks & conference contributions

262 documented records selected from a career record of more than 500 national and international addresses and engagements. The archive distinguishes lectures, conference papers, posters and conference organisation; organisational roles are not presented as invited lectures. This is a selected record, not an exhaustive list of all addresses.

## Conference organisation

**T001** Organisational contribution to National Conference on Materials Science and Technology (NCMST), 2024, IIST, Thiruvananthapuram. Listed among seminars and conferences organised in the September 2026 professional record.

Conference & workshop organisation | 2024

**T002** Organisational contribution to Polymer Processing Society Asia-Australasia Regional Conference, 2023, Udaya Samudra, Kovalam, Kerala. Listed among seminars and conferences organised in the September 2026 professional record.

Conference & workshop organisation | 2023

**T003** Organisational contribution to National Conference on Materials Science and Technology (NCMST), 2021, IIST, Thiruvananthapuram. Listed among seminars and conferences organised in the September 2026 professional record.

Conference & workshop organisation | 2021

**T004** Organisational contribution to National Conference on Materials Science and Technology (NCMST), 2019, IIST, Thiruvananthapuram. Listed among seminars and conferences organised in the September 2026 professional record.

Conference & workshop organisation | 2019

**T005** Organisational contribution to International Conference on Recent Trends in Materials Science and Technology (ICMST), 2018, IIST, Thiruvananthapuram. Listed among seminars and conferences organised in the September 2026 professional record.

Conference & workshop organisation | 2018

**T006** Organisational contribution to National Conference on Materials Science and Technology (NCMST), 2016, IIST, Thiruvananthapuram. Listed among seminars and conferences organised in the September 2026 professional record.

Conference & workshop organisation | 2016

**T007** Organisational contribution to National Conference on Materials Science and Technology (NCMST), 2015, IIST, Thiruvananthapuram. Listed among seminars and conferences organised in the September 2026 professional record.

Conference & workshop organisation | 2015

**T008** Organisational contribution to National Conference on Materials Science and Technology (NCMST), 2014, IIST, Thiruvananthapuram. Listed among seminars and conferences organised in the September 2026 professional record.

Conference & workshop organisation | 2014

**T009** Organisational contribution to National Conference on Materials Science and Technology (NCMST), 2013, IIST, Thiruvananthapuram. Listed among seminars and conferences organised in the September 2026 professional record.

Conference & workshop organisation | 2013

**T010** Organisational contribution to National Seminar on Frontiers in Chemistry (NSFC), 2012, IIST, Thiruvananthapuram. Listed among seminars and conferences organised in the September 2026 professional record.

Conference & workshop organisation | 2012

**T011** Organisational contribution to National Workshop on Computational Chemistry (NWCC), 2011, IIST, Thiruvananthapuram. Listed among seminars and conferences organised in the September 2026 professional record.

Conference & workshop organisation | 2011

**T012** Organisational contribution to International Conference on Materials Science and Technology (ICMST), 2010, IIST, Thiruvananthapuram. Listed among seminars and conferences organised in the September 2026 professional record.

Conference & workshop organisation | 2010

## Talks & scientific engagement

**T013** Invited lecture, “Sustainable Biocomposites for Structural Applications: Challenges and Opportunities”, delivered during the visit to the Polymer Technology research group, University of Borås, Sweden, 26-30 October 2026.

Invited lecture & seminar | 2026

**T014** Invited lecture, “Materials Innovations: Shaping the Future of Aerospace Technologies”, delivered during the visit to the Polymer Technology research group, University of Borås, Sweden, 26-30 October 2026.

Invited lecture & seminar | 2026

**T015** Plenary Speaker, International Conference on “Biopolymers and Green Composites (BPGC 2025) - Marching Towards Sustainability”, 8th November, 2025 at CIPET: IPT - Kochi campus.

Plenary lecture | 2025

**T016** Resource person for AICTE-ATAL Sponsored Faculty Development Programme (FDP) on “Hybrid and Multifunctional Materials: Bridging Energy, Defense and Aerospace Frontiers”, on 30th October 2025 at Chettinad College of Engineering and Technology, Karur

Faculty & student development | 2025

**T017** Plenary Speaker, NIAS-DST Training Programme on “Science and Technology: Global Developments and Perspective”, at NIAS, IISc Campus, Bengaluru, on September 19, 2025

Plenary lecture | 2025

**T018** Global Space Exploration Conference (GLEX) 2025, Jointly Organized by ISRO and The Astronautical Society of India at India International Convention Centre, New Delhi on May 7-8 2025

Invited lecture & seminar | 2025

**T019** Keynote Speaker, International Conference on Recent Trends in Mechanical Engineering at College of Engineering, Adoor on April 28, 2025

Keynote address | 2025

**T020** Guest Speaker, UKIERI (UK-India Education and Research Initiative / SPARC (Scheme for Promotion of Academic and Research Collaboration Support Programme) Symposium at University of Nottingham, UK on March 14, 2025

Invited lecture & seminar | 2025

**T021** Invited Speaker, International Conference on Space for Sustainability: Science, Technology, Education and Policy (S2:STEP2025) Organised by Centre for Space Science and Technology(CSST), IIT Roorkee on March -4, 2025

Invited lecture & seminar | 2025

**T022** Keynote Speaker, National Seminar on “Trends in Material Science and Technology” Organised by St. Berchamens College in Association With Material Research Society of India on February 14, 2025

Keynote address | 2025

**T023** Chief Guest, International Conference on Eco-Cultural Futures (ICECF) at St. Stephen's College, Uzhavoor, on February 13, 2025

Invited lecture & seminar | 2025

**T024** Plenary Speaker, Third International Conference on Science and Technology of Advanced Materials (STAM 25) at Mar Athanasius College (Autonomous), Kerala on 08.01.2025

Plenary lecture | 2025

**T025** Chairman, organizing committee, dpm-2023, SPSI Thiruvananthapuram Chapter, under the auspices of The Society for Polymer Science, India, is organizing a two-day National Conference, “New Developments in Polymeric Materials (DPM-2023)” at Thiruvananthapuram, Kerala, during March 2-3, 2023.

Conference service | 2023

**T026** Plenary Speaker Second International Conference on Science and Technology of Advanced Materials- STAM 23 at Mar Athanasius College (Autonomous), Kothamangalam, KeralaOn 31st March 2023

Plenary lecture | 2023

**T027** Resource person Seminar on “Sustainable Innovations in Material Science 2023” (SIMS-23) On April 10th, 2023 at St. Hindu College, Nagercoil, Tamilnadu

Faculty & student development | 2023

**T028** Speaker Workshop on Recent Development in Addittive manufacturing of Bioimplant Materials and its performance& Applications at NMAM Institute of Technology, Udupi, Karnataka on July 15, 2023

Invited lecture & seminar | 2023

**T029** Keynote Speaker International Conference on Advances in Material Science and Chemsitry (ICAMSC-2023) at Amrita Vishwa Vidyapeetham, Kollam on November 4, 2023

Keynote address | 2023

**T030** Distinguished speaker International Conference on Molecular Matter (ICMM)- Emerging Directions for Sustainability” at IIT Madras on December 17, 2023.

Invited lecture & seminar | 2023

**T031** Resource person Lecture for Science & Technology: Global Developments and Perspectives in NIAS-DST training programme at Banglore on 24 November, 2023.

Faculty & student development | 2023

**T032** Inaugural address at the international conference on Polymeric Materials in Medicine (ICPMM-2022) Organized jointly by Society of Polymer Science India and Sree Schitra Tirunal Institute of Medical Sciences and Technology during 25-26 February,2022

Invited lecture & seminar | 2022

**T033** Chief Guest and National Science Day Lecture at St. Xavier’s College, Vaikom, Kerala on 28th February ,2022.

Invited lecture & seminar | 2022

**T034** Session Chair and Invited Speaker at the Conference on Frontiers of Space Technology and Applications for Humanity(FSTAH-2022)on 12th- 13 th March, 2022 jointly organized by Central University of Jammu (CUJ), Samba-181143, Jammu J&K & Indian Institute of Space Science and Technology (IIST), Thiruvananthapuram.

Conference service | 2022

**T035** Key note Speaker at the National Seminar on“Advanced Functionalized Materials for Analytical, Environmental and Biomedical Applications (NSAFM-2022)” at the Department of Chemistry, University of Kerala, Kariavattom Campus on 23-25 March 2022.

Keynote address | 2022

**T036** Key note talk on Chemistry for a sustainable world during the world Environment day celebrations at Mar Ivanios College Thiruvanathapuram on 7th June, 2022.

Keynote address | 2022

**T037** Session Moderator at the conference on "Development of Space Start-up Ecosystem in India (DeSSEI: □□□□)" on 24 June 2022 at Hilton Convention Centre, Embassy Manyata Business Park, Bengaluru, INDIA organized by ASI in association with ISRO, IN-SPACe, and DRDO.

Invited lecture & seminar | 2022

**T038** Inaugural and keynote Address - “Moon day celebration” at GHS Cheruvannur, Kozhikode on July 22, 2021

Keynote address | 2021

**T039** Invited Speaker - “Beyond Horizon?” at Punnathura School, Kottayam on July 23, 2021

Invited lecture & seminar | 2021

**T040** Keynote Speaker - Dr. APJ Abdul Kalam Memorial Lecture at St. Teresa’s GHS Nedumkunnam on July 27, 2021

Keynote address | 2021

**T041** Resource Person - National level webinar on “Current trends in research & innovation, research paper publications, IPR & patents, Research projects & Fundraising” by IAE Hyderabad & CETED, Telangana on August 27, 2021

Faculty & student development | 2021

**T042** Invited Speaker - “Indo-Japan virtual workshop on Cluster Science by interdisciplinary approach: Emerging materials and phenomena” at IIT Madras on September 03, 2021

Invited lecture & seminar | 2021

**T043** Plenary Speaker - International Conference on “4th Biotechnology of New Materials-Environment -Quality of Life” by MG university and Siberian Federal University on October 10,2021

Plenary lecture | 2021

**T044** Resource Person - Chemistry Association & Webinar on Research and career opportunities in Chemistry” at St. Teresa’s College, Ernakulum on October 22, 2021

Faculty & student development | 2021

**T045** Keynote Speaker - UGC Consultative Discussion Forum on “Revitalizing the research development cell of higher education institutions towards sustainable socio economic development” organized by NAAC on November 15,2021

Keynote address | 2021

**T046** Resource Person - Addressing newly admitted research scholars in College of Engineering, Trivandrum

Faculty & student development | 2021

**T047** Organizer/ Technical committee member - International Conference on Product Lifecycle Modeling, Simulation & Synthesis (PLMSS), hosted by VSSC & IIST on December 17-18, 2021. Organized pre-conference workshop on “Digital Aerospace Manufacturing” on 16 December 2021

Conference service | 2021

**T048** Invited Talk, at the Second International Conference on Advanced materials chemistry at the interfaces of energy, environment and medicine AMCI-2020, Manonmaniam Sundranar University, Thirunelveli, Tamilnadu, 30-31 January, 2020.

Invited lecture & seminar | 2020

**T049** Invited Talk, at the National seminar on ‘new frontiers in material and environmental sciences’, S H College, Thevara, Ernakulam, 28-29 January 2020.

Invited lecture & seminar | 2020

**T050** Invited Speaker, International Conference on Science and Technology of Advanced Materials (STAM 2020) during 14-16, 2020.

Invited lecture & seminar | 2020

**T051** Plenary Speaker - International Conference on " Advanced thermo structural Materials and Thermal Protection Systems" (ADTHERM20) organized by SPSI Thiruvananthapuram Chapter and MRSI Thiruvananthapuram Chapter on January 19, 2020

Plenary lecture | 2020

**T052** Invited speaker, International Workshop on Catalysis & Applications at School of Pure & Applied Physics (SPAP), MGU on January 20, 2020

Invited lecture & seminar | 2020

**T053** Invited Speaker, Conference on "Surface Engineered Nano Systems for Bio-Medical and Space Applications" at Hall of 1960, Anna University, Chennai on January 24, 2020

Invited lecture & seminar | 2020

**T054** Resource Person, SASTRAPADHAM camp on "Go Green"for plus one students initiated by Samagra Shiksha Kerala at Kottayam on January 25, 2020

Faculty & student development | 2020

**T055** Session Chair, International Conference on Eco materials (ICEM-14), organized by National Institute for Interdisciplinary Science & Technology, Thiruvananthapuram on February 5, 2020

Conference service | 2020

**T056** Resource Person, Webinar on " Post Covid Kerala- Prospects, Problems and Labour Issues" organized jointly by Contract Labour Advisory Board, Govt of India & Sargakshetra Cultural and Charitable Centre on May 14, 2020

Faculty & student development | 2020

**T057** Invited Speaker, International Webinar series on " Sustainable Development- COVID 19, Society, Environment- The Challenges Ahead" organized by St. John's College, Agra on May 14,20 & June 19, 2020

Invited lecture & seminar | 2020

**T058** Invited Speaker, National Webinar on "Polymers- A Century of Advancement" organized by Centre for Nano Science & Technology at Amal Jyothi College of Engineering, Kanjirappally on July10, 2020

Invited lecture & seminar | 2020

**T059** Resource Person, TEQIP -III sponsored "Research and DEVELOPMENT IN Composite Materials (RDCM-2020) organized by J C Bose University of Science and Technology, Fridabad on July27, 2020

Faculty & student development | 2020

**T060** Invited Speaker, Webinar on "Exploring the dimensions of Quality Research & Teaching" at TKM College of Arts & Science, Kollam on September 23, 2020

Invited lecture & seminar | 2020

**T061** Invited Speaker , Faculty Development Programme on "Research and Carrier- Building Successful Academic and Research Career" at Vimala College, Thrissur on October 19, 2020

Invited lecture & seminar | 2020

**T062** Session Chair, International Conference on Macro molecules "100 years of Polymer Science- Past to future" (ICM-2020), organized by School of energy materials (SEM), Kottayam & Gdansk University of Technology, Gdansk on November. 13, 2020

Conference service | 2020

**T063** Keynote Speaker, Student Induction Programme ( P G) at CMS College, Kottayam on December 03,2020

Keynote address | 2020

**T064** Coordinator, National Conference on “Recent Trends in Material Science & Technology (NCMST-2020 at IIST, Thiruvananthapuram on December 07-09,2020

Conference service | 2020

**T065** Invited Speaker, International Conference on “ Molecules to Materials” (MTM-2020) at Sardar Vallabhai National Institute of Technology, Surat on December 17,

Invited lecture & seminar | 2020

**T066** Invited talk in an international conference on "Advances in Polymer Science and rubber Technology (APSRT - 2019) Vision 2030 at IIT Kharagpur

Invited lecture & seminar | 2019

**T067** Resource person/Mentor Faculty, DST-INSPIRE Internship Science Camp at Central University of kerala, Kasargode, Kerala on December 23, 2019

Faculty & student development | 2019

**T068** Invited talk in the National conference on Advances in Materials Chemistry and Physics(NCAMP - 2019), on 06.12.2019

Invited lecture & seminar | 2019

**T069** Plenary talk at Faculty and Staff Development Programme at National Institute of Technology, Calicut on June 18, 2019

Plenary lecture | 2019

**T070** Plenary talk at Faculty and Staff Development Programme at MGM College of Engineering and Technology, Muvattupuzha on June 13, 2019

Plenary lecture | 2019

**T071** Chief Guest/Keynote Speaker at the International Conference on Advances in Materials Science and Nanotechnology (ICMN-2K19) at Stella Mary's College of Engineering, Nagercoil on April 29, 2019

Keynote address | 2019

**T072** Chief Guest/Keynote Speaker at the International Multi-Conference on Computing, Communication,Electrical & Nanotechnology (I2CN-2K19) at Mangalam College of Engineering, Kottayam on April 25, 2019

Keynote address | 2019

**T073** Plenary talk at National Science Day Celebrations 2019 at St. Joseph's College for Women, Alappuzha on February 27, 2019

Plenary lecture | 2019

**T074** Chief Guest and Invited Speaker at National Science Day Celebrations 2019 at T.K Madahva Menorial College, Alappuzha on February 27, 2019

Invited lecture & seminar | 2019

**T075** Plenary talk at the National Conference on Advanced Functional Materials (NCAFM-2019) organised jointly by S.T Hindu College, Nagercoil, Materials Research Society of India (MRSI), Trivandrum Chapter and The Society for Polymer Science, India (SPSI) at S.T Hindu College, Nagercoil on February 25, 2019

Plenary lecture | 2019

**T076** Attended IMM National Seminar 2019 on the topic "Materials Management: National Challenges and Solutions" at Hotel Mascot, Thiruvananthapuram on February 23, 2019

Conference participation | 2019

**T077** Plenary talk at National Seminar on Nanoscience and Nanotechnology (NANO 2019) Oranized by the Post-Gaduate co-sponsored by Science and Engineering Research Board (DST-SERB) and Kerala State Council for Science, Technology and Environment (KSCSTE) at Bishop Moore College, Mavelikara on February 14, 2019

Plenary lecture | 2019

**T078** Resource Person at National Seminar on Recent Trends in Material Science at Pavanatma College, Murickaseery, Idukki on January, 28, 2019

Faculty & student development | 2019

**T079** Plenary talk on 'Nanotechnology: Boon or Bane ' for Sastrapadham ( Science Enrichment Programme for Higher Secondary Education)organized by S.S.A. and Directorate of Higher Secondary Education, Trivandrum at St. Berchmans College, Changanassery on January 20, 2019

Plenary lecture | 2019

**T080** Invited speaker, DST - SERB sponsored National Seminar on Nano Science & Nano Technologies at Bishop Moore College, Mavelikkara on February 14, 2019

Invited lecture & seminar | 2019

**T081** Invited speaker at 3rd International Conference on Optoelectronic and Nano Materials for Advanced Technology (icONMAT - 2019) at CUSAT, Cochi on January 5, 2019

Invited lecture & seminar | 2019

**T082** Expert member/Deliver a talk at DST - INSPIRE Internship Residential Science Camp Programme at St.Mary's College, Sulthanbathery on December 27, 2018

Invited lecture & seminar | 2018

**T083** Expert member/Deliver a talk at DST - INSPIRE Internship Residential Science Camp Programme at Central University of Kerala, Kasaragod on December 26, 2018

Invited lecture & seminar | 2018

**T084** Attended for four days International Conference on Polymer Science and Technology, SPSI-MACRO-2018 at Indian Insitiute of Science Education and Research (IISER), Pune on December 20,2018

Conference participation | 2018

**T085** Plenary talk on Nanocomposite for Structural Application at Thangal Kunju Musaliar College of Engineering, Kollam on December 18, 2018

Plenary lecture | 2018

**T086** Resource Person at "Talent Hunt Sasthrajalkakam' Organized by State Institute of Educational Technology (SIET), Kerala at St. Berchmans College, Changanassery on December 2, 2018

Faculty & student development | 2018

**T087** Plenary talk at National conference on "Emerging Frontiers in Chemical Science (EFCS2018) at Farook College Campus, Kozhikide on November 24, 2018

Plenary lecture | 2018

**T088** Plenary talk at the International Conference on Advances in Materials Science ICAMS 2018 at Sree Sankara College,Kalady,Ernakulam on October 24, 2018

Plenary lecture | 2018

**T089** Plenary lecture on'Super Toughened Epoxy Nanocomposited for Space Applicatons' in the National Seminar on Recent Trends in Nanotechnology, Sponsored by Kerala State Council for Science Technology ad Environment (KSCSTE-TVM) at Newman College, Thodupuzha on October 15, 2018

Plenary lecture | 2018

**T090** Resource person at the two day National seminar on 'Recent Advance in Materials Science' at NSS Hindu College, Changanacherry on September 06, 2018

Faculty & student development | 2018

**T091** Plenary talk at Bishop Moore College, Mavelikara in connection with the DBT Star College Scheme on March 22, 2018

Plenary lecture | 2018

**T092** Plenary talk on 'Surface Engineered Nanosystems for Bio-Medical Applictions' in the International Conference on Advanced Nanostructures (ICAN - 2018) at Catholicate College, Pathanamthitta on March 14, 2018

Plenary lecture | 2018

**T093** Plenary talk at the National Conference on "Recent Advances in Material Science and Technology" at Ethiraj College, Chennai on February 13, 2018

Plenary lecture | 2018

**T094** Plenary talk at the National Seminar on Recent Trends in Material Science and Technology at St. Berchmans College, Changanassery on February 7, 2018

Plenary lecture | 2018

**T095** Chair a technical sessions in the International Conference on Composites Manufacturing Technologies and Applications (ICCMA - 2018) for two days at Hotel Taj Deccan, Banjara Hills, Hyderabad on January 19, 2018

Conference service | 2018

**T096** Invited talk for two days on biobased composites at the Biomaterials for Tomorrow (B4T) conference at Kochi Marriot Hotel, Kochi on January 08, 2018

Invited lecture & seminar | 2018

**T097** Plenary talk at DST - Internship Science Camp at Central University of Kerala, Kasaragod on December 29, 2017

Plenary lecture | 2017

**T098** Attended for three days International Conference on Advanced Materials and Process (ADMAT 2017 SkyMat)MAke in India, Fly in Space: Enabling Materials and Processes at Kovalam, Thiruvananthapuram on December 14, 2017

Conference participation | 2017

**T099** Plenary lecture at the International Summit for packaging Industry at Nehru Place, New Delhi on October 27, 2017

Plenary lecture | 2017

**T100** Keynote address at the KSCSTE Sponsored National Seminar on Emerging Trends in Nanocomposites at St. Thomas College, Palai on October 12, 2017

Keynote address | 2017

**T101** Chief Guest/Keynote address at 5th National Conference on Advanced Functional Materials and Applicatins (NCAFMA-2017) at Kalasalingam University, Tamil Nadu on March 30, 2017

Keynote address | 2017

**T102** Plenary lecture at the National Conference on Recent Advances in the Applications of Macromolecular Materilas (RAAMM - 2017), at Gandhigram Rural Institute, Dindigul, Tamil Nadu on March 02, 2017

Plenary lecture | 2017

**T103** Chief Guest/ Plenary Lecture at 6th National Seminar on Advances in Materilas Science - 2017 (NSAMS 2017) at Manonmaniam Sundaranar University, Tirunelveli on March 02, 2017

Plenary lecture | 2017

**T104** Plenary talk at National Conference on " Recent trends in Biomaterials (BIOMEET 2017) at Bishop Moore College, Mavelikara on February 17, 2017

Plenary lecture | 2017

**T105** Plenary talk at National Conference on "Nanomedicine Current Scenerio and Future Opportunities" at SN College, Chenganoor on February 17, 2017

Plenary lecture | 2017

**T106** Chief Guest/Keynote Speaker at the Inauguraion of Dalton's Conclave & Award ceremony 2016-2017 at Catholic College, Pathanamthitta on January 23, 2017

Keynote address | 2017

**T107** Chief Guest/Keynote Speaker at the Art Festival inauguration at Travancore Medical College, Kollam on January 15, 2017

Keynote address | 2017

**T108** Invited talk for four days at International Conference on Polymer Science and Technology [MACRO 2017] on January 8, 2017

Invited lecture & seminar | 2017

**T109** Expert Mentor at INSPIRE Internship Science Camp at Sree Narayana College, Kannur on December 29, 2016

Faculty & student development | 2016

**T110** Resource Person at National Conference on ‘Recent Trends in Material Science’ at Sarah Tucker College, Tamil Nadu on December 15, 2016

Faculty & student development | 2016

**T111** Expert Mentor at India-UK joint workshop on 'Nano-Biomaterials for water Purification at M.G University, Kottayam from December12, 2016 to December 16, 2016

Faculty & student development | 2016

**T112** Chief Guest at the Inauguraion of the Centre for Nanotechnology and Smart Materials at Viswajyothi College of Engineering & Technology, Muvattupuzha on November 29, 2016

Invited lecture & seminar | 2016

**T113** Resource Person at IIST@Schools Programme, Thalaserry, Kannur on November 25, 2016

Faculty & student development | 2016

**T114** Invited Lecture on Application of Polymer Chemistry in Space Technology at Mar Thoma College of Science & Technology, Ayur on November 9, 2016

Invited lecture & seminar | 2016

**T115** Plenary lecture at the National Conference on Biopolymers & Green Composites (BPCG 2016 - 4th in Series) at Centre for Biopolymer Science and Technology (CBPST-CIPET), Kochi on September 29, 2016

Plenary lecture | 2016

**T116** Plenary lecture at the International Conference on Functional Materials at Centre for Scientific and Applied Research, PSN College of Engineering and Technology, Tirunelveli on September 10, 2016

Plenary lecture | 2016

**T117** Plenary talk at IIST@Schools Programme,at Chakkittapara, Kozhikode on June 20, 2016

Plenary lecture | 2016

**T118** Plenary talk at Karunya University, Coimbatore on April 28,2016

Plenary lecture | 2016

**T119** Plenary talk at the Programme for otivating innovation in Science at NIST & Science & Technology on April 26, 2016

Plenary lecture | 2016

**T120** Plenary talk at the International Conference on Materials Research and Applications (ICMRA 2016) at CMR Technical Campus, Hyderabad on March 12, 2016

Plenary lecture | 2016

**T121** Plenary talk at National Seminar On Advanced Analytical Techniques (NSAAT 2016) at Mar Ivanios College (Autonomous), Trivandrum on March 11, 2016

Plenary lecture | 2016

**T122** Plenary talk for two days at National Workshop on Fundemental and Applicantiona od Material Science at Srinivasa Ramanujan Institute For Basic Sciences, Kottayam on March 4, 2016

Plenary lecture | 2016

**T123** Resource Person at Faculty and Staff Development Programme(FSDP) on 'Self Motivation and Organizational Behaviour' at Govt. Engineering College, Palakkad on February 27, 2016

Faculty & student development | 2016

**T124** Chief Guest at National Science Day Celebrations 2016 at Sree Narayana College, Chengannur on February 25, 2016

Invited lecture & seminar | 2016

**T125** Plenary talk at National Science Day Celebrations Sastra Darsan 2016: Nanotechnology - Applications and Implications for the Envorinment at Sree Narayana College, Varkala on February 22, 2016

Plenary lecture | 2016

**T126** Plenary lecture for two day National Conference on Recent Advances in Composites “NCRAC-2016” at CMR Technical Campus, Hyderabad on February 12, 2016

Plenary lecture | 2016

**T127** Resource Person at Green Nanotechnology in Material Engineering & Energy application under Tequip programme at College of Engineering, Adoor on December 18, 2015

Faculty & student development | 2015

**T128** Plenary Talk at Green Technology for Green Environment at Sreenarayanan Mangalam College, Eranakulam on December 04, 2015

Plenary lecture | 2015

**T129** Plenary Talk at Nano Technology for Packing Applications at World Packaging Congress, organized by IIP, Mumbai at Hotel Renaissance, Mumbai on October 10, 2015

Plenary lecture | 2015

**T130** Plenary Talk at UGC Sponsored Diamond Jubilee Seminar on “Advanced Functional Material” at Mar Athanasius College, Kothamangalam on September 16, 2015

Plenary lecture | 2015

**T131** Attended the International Conference on “Advanced Materials and Manufacturing Process for Strategic Sectors”-ICAMPS-2015 at ICAMPUS, TVM on May 15,2015

Conference participation | 2015

**T132** Plenary Talk at Nano Technology & Space Application (AICTE Sponsored) at Amaljyothi College of Engeneering, Kanjirapalli on April 27, 2015

Plenary lecture | 2015

**T133** Resource Person at Polymers & Its Application at Indian Naval Academy, Ezhimala on March 25, 2015

Faculty & student development | 2015

**T134** Plenary talk at New Frontiers in Nano Technology & Material Science at Sreenarayana College , Chengannur on March 20, 2015

Plenary lecture | 2015

**T135** Resource Person at the Interaction Programme for PhD Scholars at UGC-Academic Staff College, Calicut on March 16, 2015

Faculty & student development | 2015

**T136** Plenary lecture at Science Day Celebration at SITTT&R Kalamassery on February 25, 2015

Plenary lecture | 2015

**T137** Plenary lecture for the two day National Conference on Recent Advance in Polymer Science &Technology, MACRO TECHNEVISTA-2015 at Lekshmi Narayanan Institute of Technology, Nagpur on January 23, 2015

Plenary lecture | 2015

**T138** Plenary lecture at the National Seminar on Emerging Nano Meterials, NSEN-2015 at Devamatha College, Kottayam on January 1, 2015

Plenary lecture | 2015

**T139** Invited Lecture at Inaugural Ceremony of the Chemistry Association of the Sree Narayana College, Nattika, Thrissur on October 15, 2014

Invited lecture & seminar | 2014

**T140** Resource Person for the UGC sponsored National Seminar on Nanochemistry and Nano Biotechnology, NANOCHEMBIO 2014 at St. Thomas College, Palai on October 9, 2014.

Faculty & student development | 2014

**T141** Plenary Lecture for the three day “State Seminar on Enivironmental Management” at BCM College Kottayam on 24th July 2014.

Plenary lecture | 2014

**T142** Special invitee at the Annual Residential Camp at Mar Theophius College, TVM on 27th May, 2014.

Invited lecture & seminar | 2014

**T143** Plenary lecture at the national conference on modern analytical techniques organized by the MPMMSN college trust, Shornur on 27thMarch 2014.

Plenary lecture | 2014

**T144** Key note address at the National Conference on Advanced Functional Materials and Applications at Kalasalingam University on 21stMarch 2014

Keynote address | 2014

**T145** Resource Person at the New Paradigms in Chemistry,Ab Initio,Ad Futurum at St.Marys College ,Sulthan Bathery on 10thMarch 2014

Faculty & student development | 2014

**T146** Plenary lecture at Fostering Scientific Temper -Trends and Opportunities in Chemistry at St.Berchamans College , Changanachessery on 28th Feb 2014

Plenary lecture | 2014

**T147** Key Note address at The Emerging Trends in Nano science and Technology at Newman college Thodupuzha on 28th Feb 2014.

Keynote address | 2014

**T148** Invited talk at National Conference on Advanced Materials at PGP College of Arts and Science and Management on 7th Feb 2014

Invited lecture & seminar | 2014

**T149** Plenary lecture at the Emerging trends in polymeric materials at Christian college, Chengannur on 24th Jan 2014.

Plenary lecture | 2014

**T150** Resource Person at Environmental conservation and living" organized by Nirmala college, Kuravilangad on 11th November 2013.

Faculty & student development | 2013

**T151** Resource Person at XVth Refresher Course in "Chemistry" organized by Nirmala college, Muvattupuzha on 9th November 2013.

Faculty & student development | 2013

**T152** Resource Person at the National workshop on Research methodology organized by UGC-Academic Staff College, University of Calicut on 5th November 2013.

Faculty & student development | 2013

**T153** Resource Person at Refresher Course in "Nano Science" organized by UGC-Academic Staff College, University of Kerala on 23rd October 2013.

Faculty & student development | 2013

**T154** Invited speaker at Advances in Nanoscience and Nanotechnology NIIST on 23rd March, 2013.

Invited lecture & seminar | 2013

**T155** Plenary speaker at National Seminar on Green Materials organized by Department of Chemistry, Bishop Moore College, Mavelikara on 28th Feb 2013.

Plenary lecture | 2013

**T156** Resource Person at XVth Refresher Course in "Chemistry" organized by UGC-Academic Staff College, University of Kerala on 4th Feb 2013.

Faculty & student development | 2013

**T157** Special Invitee at NANO INDIA 2013 at National Institute for Interdisciplinary Science and Technology during 19th & 20th Feb 2013.

Invited lecture & seminar | 2013

**T158** Resource Person at XXVIIth Refresher Course in "Nanosciences" organized by UGC-Academic Staff College, University of Kerala on 14th Jan 2013.

Faculty & student development | 2013

**T159** Resource person in DST-INSPIRE Science Camp (Innovation of Science Pursuit for Inspire Research) on 28th Dec 2012 at IIT Delhi.

Faculty & student development | 2012

**T160** Plenary speaker at the national seminar on “Frontier Areas of Chemistry” on 05th Dec 2012 and 06th Dec 2012 at MES Keveeyam College, Valanchery, Malappuram.

Plenary lecture | 2012

**T161** Invited talk at the DST -INSPIRE programme, on “Fascination of Science” at Assumption College, Changanachery, on 28th Nov 2012.

Invited lecture & seminar | 2012

**T162** Invited talk at the National Conference on Composites (INCCOM-11) ON 03rd Nov 2012 at Amrita Viswavidya Peetam, Coimbatore.

Invited lecture & seminar | 2012

**T163** Attended the “International Rubber Conference and IRRDB Meetings” as an Invitee during 29.10.2012 to 02.11.2012 at Hotel Samudra, KTDC Kovalam.

Conference participation | 2012

**T164** Invited speaker on IVth International Conference on “Advanced Nanomaterials (ANM 2012)” on 18.10.2012 at IIT Madras.

Invited lecture & seminar | 2012

**T165** Plenary speaker at the National Seminar on Advanced Polymers, SCIENTIA-2012, held at the Department of Polymer Engineering, MG University, College of Engineering, Thodupuzha.

Plenary lecture | 2012

**T166** Plenary lecture on “Green materials” at BCM College, Kottayam on 26th July, 2012.

Plenary lecture | 2012

**T167** Plenary lecture on “Fascination of Science” at Student Police Cadet camp, Allapuzha on 1st May 2012.

Plenary lecture | 2012

**T168** Plenary speaker at the seminar at St. Thomas College, Pala on “Emerging trends in Nanotechnology and Microbiology” on 3rd March 2012.

Plenary lecture | 2012

**T169** Invited lecture at CSIR Programme on Youth for Leadership in Science (CPYLS Programme) organized by National Institute for Interdisciplinary Science and Technology, Thiruvananthapuram on 27th Dec 2011.

Invited lecture & seminar | 2011

**T170** Invited lecture on “Nanotechnology for Space Applications” organized by St. Xavier’s College, Vaikom as part of the International Year of Chemistry on 22nd Dec 2011.

Invited lecture & seminar | 2011

**T171** Invited lecture on “Naonomaterials” organized by Pavantma College, Murikkassery, Idukki on 12th Dec 2011.

Invited lecture & seminar | 2011

**T172** Invited Talk on “Nanotechnology” in the National Seminar “Emerging Trends in Nanotechnology” at Bishop Kurialancherry College for Women, Kottayam on 30th Sept 2011.

Invited lecture & seminar | 2011

**T173** Invited Lecture on “National Seminar on Development of Chemistry through Ages” organized by Department of Chemistry, National Institute of Technology, Calicut on 5th Aug 2011.

Invited lecture & seminar | 2011

**T174** Keynote address on “Nanotechnolgy for space applications” at Amrita Vishwa Vidyapeetham Unuiversity, Kollam in connection with the National Science day celebrations on March 7, 2011

Keynote address | 2011

**T175** Invited lecture on “High performance composites” during the National science day celebration on February 28, 2011 organized by the centre for nanoscience and nanotechnology at Mahatma Gandhi University, Kottayam.

Invited lecture & seminar | 2011

**T176** Invited lecture on “New generation composites” on January 28, 2011 at the International Conference on Functional polymers organized by NIT, Calicut.

Invited lecture & seminar | 2011

**T177** Participated in a round table discussion on “Nanotechnology in agriculture: new tools for sustainable development” held by Food and Agriculture Organization (FAO) of the United Nations as an international expert for Nanotechnology and Renewable Energy.

Round-table discussion | 2011

**T178** Delivered an plenary lecture on “Bio-nanocomposites Based on Agricultural Fibers” at the International Conference on Food and Agriculture Applications of Nanotechnologies ( NANOGRI-2010) in Sao Pedro, Brazil during June 20-25, 2010 organized by the Food and agricultural Organization (FAO) of the United Nations in collaboration with Brazilian Coordination for graduate Education(CAPES) and Brazilian corporation for Research in Agriculture (EMBRAPA).

Plenary lecture | 2010

**T179** Invited lecture on “Biocomposites and green materials” at B.C.M College, Kottayam on July 23, 2010.

Invited lecture & seminar | 2010

**T180** Invited lecture on “Space applications of polymer composites” in the UGC sponsored seminar New Frontiers In Teaching Chemistry at K.E College Mannanam on June 19, 2010.

Invited lecture & seminar | 2010

**T181** Invited lecture on “Role of Natural fibre composites as future materials” at Dept of Mechanical Engineering, Velagapudi Ramakrishna Siddhartha Engineering College,Vijayawada, March 11-12, 2010.

Invited lecture & seminar | 2010

**T182** Oral Presentation on “Dynamic, Mechanical & Thermal Properties of Cotton/PP Commingled Composite Systems” at International Conference on Advances in Polymer Technology, February 26-27, 2010.

Oral presentation | 2010

**T183** Poster presentation on “Influence of cold drawing on the properties of microfibrillar structured insitu composites from PP &PET.” at International Conference on Advances in Polymer Technology, February 26-27, 2010.

Poster presentation | 2010

**T184** Poster presentation on “Chlorobutyl rubber nanocomposites as effective barrier materials” at International Conference on Advances in Polymer Technology, February 26-27, 2010.

Poster presentation | 2010

**T185** Invited lecture on “Introduction to polymer nanocomposites” at Holycross College, Tirunelveli on February19, 2010.

Invited lecture & seminar | 2010

**T186** Invited lecture on “Novel techniques for the processing of in situ microfibrillar composites from polymer blends” at the International conference on polymer processing, ICPPC-2010, January 15-17, 2010, at Mahatma Gandhi University, Kerala.

Invited lecture & seminar | 2010

**T187** Chaired a session at the International conference on polymer processing, ICPPC-2010, January 15-17, at Mahatma Gandhi University, Kerala.

Conference service | 2010

**T188** Invited lecture on “Nanomaterials in space applications” at the national staff development programme on December 22 , 2009 at NIT, Surathkal

Invited lecture & seminar | 2009

**T189** Invited lecture on “Physical and mechanical properties of high performance rubber nanocomposites” at the National conference on advanced materials , NCAM -2009 organised by PSN college of Engineering, Tirunelveli on August 25-27, 2009.

Invited lecture & seminar | 2009

**T190** Invited lecture on “Polymer-Polymer in-situ micro fibrillar composites” at the MRSI Annual Technical Meeting held on June 29, 2009 at NIIST, Trivandrum.

Invited lecture & seminar | 2009

**T191** Invited lecture on “Recent advances in polymer based micro and nanocomposites” in the international conference on innovative technologies, ICIT -09 on June 18-19, 2009, PDM College of Engineering, Haryana.

Invited lecture & seminar | 2009

**T192** Invited lecture on “Effective utilization of green materials as an alternative to waste recycling” at the National conference on advanced materials , NCAM -2009 organised by PSN college of Engineering, Tirunelveli.

Invited lecture & seminar | 2009

**T193** Invited lecture on “High performance rubber nanocomposites” in the International conference on nanostructured materials and nanocomposites ICNM-2009 on April 6-8,2009, Kottayam , Kerala

Invited lecture & seminar | 2009

**T194** Invited lecture on the “Recent Trends in Material Science“, organized by the Department of Physics, University of Calicut on 27th March, 2009

Invited lecture & seminar | 2009

**T195** Invited lecture on “Nanofabrication techniques” at the NANO-09 national seminar organized by S.N College, Chengannur on 17-18th March 2009.

Invited lecture & seminar | 2009

**T196** Plenary speaker on “Effect of draw ratio on the morphology and dynamic rheology of microfibrillar composites based on PP and PET” at the International conference on blends and composites, ICBC 2008, September 22-24, 2008, Kottayam, Kerala.

Plenary lecture | 2008

**T197** Invited lecture on “Nanocomposites in space technology” at IHRD, September 2008, Mallapally.

Invited lecture & seminar | 2008

**T198** Delivered a key note speech on the occasion of the inauguration of the Science Aptitude Developer Programme (SADP) at ST BERCHMANS COLLEGE, Changanacherry on 16thAugust, 2008.

Keynote address | 2008

**T199** Plenary speaker, 4th international conference on Science and Technology of Composites Materials, COMAT 2007, at the Federal University of Rio De Janeiro, Rio De Janeiro, Brazil, during December 9-12, 2007.

Plenary lecture | 2007

**T200** Plenary speaker, International conference on Natural polymers, bio polymers, Blends and Gels: Macro to Nano Scales ICNP 2007, November 19-21, 2007, Kottayam, Kerala

Plenary lecture | 2007

**T201** Plenary speaker international conference on Polymer Processing ICPP 2007, at the Beijing University of Chemical Technology, Beijing, China, during May 18-20, 2007.

Plenary lecture | 2007

**T202** Invited lecture at the Annual Meeting of International Federation of Catholic Universities (IFCU), Barcelona, Spain, Nov.30 Dec.2, 2006

Invited lecture & seminar | 2006

**T203** Seminar on “Natural polymers and Composites”. University College of Boras, Sweden, October 11,2006

Invited lecture & seminar | 2006

**T204** Invited Lecture at the national seminar on Advances in Natural Polymer Composites, Amrita School of Engineering, Coimbatore, Tamilnadu, India, August 18-19, 2006

Invited lecture & seminar | 2006

**T205** Invited Lecture at the national seminar on Novel trends in Polymer Composites, Bishop Moore College, Mavelikara, Kerala India, Feb.14-15, 2006

Invited lecture & seminar | 2006

**T206** Invited Lecture at the national seminar on Recent trends in Polymer Science and Technology, Govt. College, Kattappana, Kerala India, Jan.27-28, 2006

Invited lecture & seminar | 2006

**T207** Invited Lecture at the national seminar on Polymer Technology- Modern trends, Sree Kerala Varma College, Thrissur, Kerala India, Dec.8-9,2005.

Invited lecture & seminar | 2005

**T208** Invited Lecture at the International Conference on Polymer Blends , Composites and Gels, Mahatma Gandhi. University, Kottayam, Kerala, India, 21-23, 2005.

Invited lecture & seminar | 2005

**T209** Invited Lecture at the national seminar on Polymer Processing Technology, M M N S S College, Kottiyam, Kollam, Kerala India, June 22-23, 2005

Invited lecture & seminar | 2005

**T210** Invited lecture on ” Intercontinental Cooperation for teaching and research in Science at the Science Sectorial group workshop organized by International Federation of Catholic Universities(IFCU), held at Domus Internationals, Rome, March 25-27, 2004.

Invited lecture & seminar | 2004

**T211** Seminar on “Influence of Microstructure and chemical modifications on the physical and mechanical properties of natural fibre reinforced polymer composites” at the Institute of Material Science, Martin Luther University, Halle-wittenberg, Germany, March 23, 2004.

Invited lecture & seminar | 2004

**T212** Seminar on ” Natural fibre reinforced polymer composites: Challenges and opportunities”, Institute of Composite Materials and surface Technology, Chemnitz University of Technology, Chemnitz, Germany, March 19, 2004

Invited lecture & seminar | 2004

**T213** Course on “Polymer composites: Challenges and Opportunities”, Department of Chemistry, St. Stephen’s College, Pathanapuram, Kerala, December 11, 2003

Faculty & student development | 2003

**T214** Invited Lecture, POLYVISTA 2002, Organised by Amrita Institute of Technology and Science, Coimbatore, Tamilnadu, August 2-3, 2002

Invited lecture & seminar | 2002

**T215** Invited Lecture at the National workshop on “Recent Advances in Polymer Blends and Composites”, School of Chemical Sciences, M.G. University, Kerala, India, November 26-27, 2001.

Invited lecture & seminar | 2001

**T216** Seminar on ‘Recent Advances in natural fibre based Micro and bio composites School of Chemical Sciences, Mahatma Gandhi University, Kerala, June 18, 2001

Invited lecture & seminar | 2001

**T217** Invited lecture at the SICOMP international conference on manufacturing and design of composites, held at Pite Havsbad, Sweden, May 28-29, 2001.

Invited lecture & seminar | 2001

**T218** Course on “Novel processing techniques for composits, Regional Engineering College, Calicut, Kerala, India, 24th March, 2001.

Faculty & student development | 2001

**T219** Course on ” An introduction to polymer science and technology” Academic staff college, Calicut, 21st Dec. 2000.

Faculty & student development | 2000

**T220** Invited lecture at the Third international Symposium on Natural polymers and Composites-ISNAPOL2000, held at Sao Pedro-SP, Brazil, May 14-17, 2000.

Invited lecture & seminar | 2000

**T221** Course on “Novel fabrication techniques for composites materials” at School of Chemical science, M.G. University on 24th April, 2000 ( UGC sponsored refresher course for college teachers), Kerala.

Faculty & student development | 2000

**T222** Course on Fibre reinforced plastic composites: Theory and Practice, at the School of Chemical Sciences, Mahatma Gandhi University, Kottayam, Kerala on 8th February,2000.

Faculty & student development | 2000

**T223** Course on ” Composite materials for Structural Engineering Applications” at the Federal University of Rio de Janeiro, Brazil, from 27th Nov. to 6th December, 1999.

Faculty & student development | 1999

**T224** Seminar on Natural fibre Reinforced polymer composites : Status and Future, at the Pontifical University of Rio de Janerio, Brazil, on 1st December, 1999.

Invited lecture & seminar | 1999

**T225** Seminar on “The use of natural fibres as reinforcements in polymer composites”, At the Institute of Macromolecular Sciences(IMA), Rio de Janario, Brazil on 30th November, 1999.

Invited lecture & seminar | 1999

**T226** Seminar on ” The use of natural fibres as reinforcements in polymer composites”, At the Centro Nacional de Pesquisa e desenvolvimento de Instrumentacao Agropecuaria, CNPDIA/EMBRAPA, Sao Carlos-Sp, Brasil, on, 25th Nov. 1999.

Invited lecture & seminar | 1999

**T227** Invited lecture at the ” Worldwide Amazon International Rubber Conference”, held at Manaus, Amazon, Brazil, from 31st October to November 4th, 1999.

Invited lecture & seminar | 1999

## Conference contributions

**T228** B. D. S. Deeraj and Kuruvilla Joseph , Technical Poster, Rheological and Visco-elastic Performance Evaluation of SBC Electrospun nanofiber/Epoxy Composites: Experimental data Vs Models, SPSI MACRO 2018, IISER Pune, December 19-22, 2018.

Poster presentation | 2018

**T229** B.D.S.Deeraj and Kuruvilla Joseph Poster presentation entitled "Improved mechanical and rheological properties of microfibrillar composites , Indo-Japan joint symposium, February 2017

Poster presentation | 2017

**T230** B.D.S.Deeraj, Raneesh konnala and Kuruvilla Joseph "Development of High Performance In-Situ Polymer/Polymer Microfibrillar Composites Based on PP/Nylon 6 Blend System: Effect of Draw Ratio and Nano Fillers, MACRO 2017, January 2017

Conference paper | 2017

**T231** Meegle S Mathew and Kuruvilla Joseph Poster Presentation entitled "Choline induced selective fluorescence quenching of Acetylcholinesterase conjugated Au@BSA quantum clusters" International Symposium on Clusters, Cluster-Assemblies and Nanomaterials (ISCAN 2016)

Poster presentation | 2016

**T232** Meegle S Mathew and Kuruvilla Joseph Poster Presentation entitled "pH assisted aggregation induced emission (AIE) of digitonin" National Conference on Material Science and Technology (2016)

Poster presentation | 2016

**T233** Meegle S Mathew and Kuruvilla Joseph Oral Presentation entitled "Choline induced selective fluorescence quenching of Acetylcholinesterase conjugated Au@BSA quantum clusters" International Symposium on Photonics Applications and Nanomaterials (ISPAN-2015)

Oral presentation | 2015

**T234** Najiya K.P.P and Kuruvilla Joseph. "Transparent and electrically conductive polyimide composites with CNT/graphene hybrids having electrostatic charge mitigating characteristics for space application". SPSI - Polymer Conference for Young Researchers . CSIR,NIIST , December 2015

Conference paper | 2015

**T235** S Gayathry, AA Thomas, J Lavanya, N Gomathi, K Joseph, S Neogi, ...Effect of carbon nanotubes on mechanical, electrical and thermal properties of plasma-modified multi-walled carbon nanotubes/polyimide nanocomposites. 2ND INTERNATIONAL CONFERENCE ON EMERGING TECHNOLOGIES: MICRO TO NANO 2015 ...

Conference paper | 2015

**T236** Raneesh Konnola and Kuruvilla Joseph Poster presentation entitled "Enhanced Mechanical Performance of Epoxy Nanocomposites Filled with poly(phenylenesulfone) like Polymer Grafted Multi-walled Carbon Nanotube" NCCM 2015, NPL Delhi

Poster presentation | 2015

**T237** Raneesh Konnola and Kuruvilla Joseph Poster presentation entitled" Polymer Grafted Multi-walled Carbon Nanotube as a Novel Toughening Agent for Epoxy System" ICAMPS, Trivandrum, 13-15 May 2015

Poster presentation | 2015

**T238** Raneesh Konnola and Kuruvilla Joseph Oral presentation entitled "Polymer Grafted Carbon Nanofillers for High Strength Toughened Epoxy Nanocomposite" INCCOM-13, VSSC Thiruvananthapuram, 14-15, November 2014

Oral presentation | 2014

**T239** Raneesh Konnola and Kuruvilla Joseph. Covalent Integration of Polymers on Carbon Nanofillers for Improving Fracture Toughness of Epoxy nanocomposites; PCYR'14,NIIST, Thiruvananthapuram, 18 October 2014

Conference paper | 2014

**T240** Raneesh Konnola and Kuruvilla Joseph Oral presentation entitled " Chemically Modified Carbon Nanofillers as New Toughening Agents for Epoxy Matrix" NCMST 2014, Indian Institute of Space Science and Technology, Thiruvananthapuram, 28-30 July 2014

Oral presentation | 2014

**T241** Raneesh Konnola., and K. Joseph Poster presentation entitled "Effect of Polyhedral Oligomeric Silsesquioxane on the Surface Morphology, Fracture Toughness, Thermal and Mechanical Properties of Nanoclay/Epoxy Nanocomposites" ICAFM 2014, NIIST Trivandrum Feb 19-21, 2014.

Poster presentation | 2014

**T242** Mahesh. S.,Raju. D., Lakshmi. C.L., Devi Renuka. K., K. Joseph..,''Light Induced Transformation of Soft Nanostructures'' in the proceedings of International Conference on Advanced Functional Materials (ICAFM), 19-21 February, 2014: pp 222.

Conference paper | 2014

**T243** Raneesh Konnola., and K.Joseph Oral presentation entitled "Rheological studies on the curing of poly(acrylonitrile-co-butadiene) - POSS nanocomposite" PPS Asia/Australia Conference (PPS-2013), IIT Bombay 4-7 December 2013.

Oral presentation | 2013

**T244** Raneesh Konnola and Kuruvilla Joseph Oral presentation entitled " Studies on Thermal Decomposition of poly(acrylonitrile-co-butadiene) - POSS Nanocomposite" Research Scholar's Day 2013, Indian Institute of Space Science and Technology, Thiruvananthapuram, 16-17 December, 2013

Oral presentation | 2013

**T245** Raneesh Konnola., and K. Joseph Oral presentation entitled "Kinetic Analysis of the Nonisothermal Decomposition of POSS-CTBN nanocomposite",ICAPM 2013, MG UNIVERSITY, Kottayam, 11-13 October 2013.

Oral presentation | 2013

**T246** Raneesh Konnola and Kuruvilla Joseph. Novel Toughened Epoxy Nanocomposite Based on Hydroxyl Terminated poly(ethersulfone) Grafted Multi-walled Carbon Nanotube; NCMST 2013, Indian Institute of Space Science and Technology, Thiruvananthapuram, 10-12 July 2013

Conference paper | 2013

**T247** Raneesh Konnola and Kuruvilla Joseph. Fracture Toughness Behavior of Rubber Modified POSS Epoxy Nanocomposites;NANO INDIA 2013, NIIST, Thiruvananthapuram, 19-20 February 2013

Conference paper | 2013

**T248** Raneesh Konnola., K.M Usha., and K. Joseph. Oral presentation entitled“ Multi-scale composites-Challenges in processing and enhancement in mechanical properties” International Conference on Safety by Design 2013” held at JCET Ottappalam, 16-17 August,2013.

Oral presentation | 2013

**T249** Raneesh Konnola., and K.Joseph.“Cure Kinetics Studies on Carboxyl Terminated poly(acrylonitrile-co-butadiene)-POSS Composites Using Differential Scanning Colorimetry”, FAPS-MACRO 2013, IISc Bangalore 15-18 May 2013.

Conference paper | 2013

**T250** Leena G Nair., K.Joseph., K,Reghunadan Nair C P,Neogi S., and Gomathi N,”Surface Modification of Multiwall Carbon Nanotubes by N2/O2 Plasma treatment” Presented in Chemcon 2013, organized by Indian Institute of Chemical Engineers(IIChE) held in Mumbai during Dec 27-30,2013.

Conference paper | 2013

**T251** V Raj, K Joseph.Highly selective, rapid and naked eye detection of cholesterol in blood serum based on the etching of tomatine gold nanoparticles: a non enzymatic blood cholesterol monitor. 23rd Swadeshi science congress. 6-8 November, 2013

Conference paper | 2013

**T252** Raneesh Konnola and Kuruvilla Joseph. Chemical Modification of Carbon Nanotubes; Research Scholars’ Day, IIST, Thiruvananthapuram, 17-19 December 2012

Conference paper | 2012

**T253** TV Mathew, K Joseph, S Thomas, Mechanical and physical properties of lignin filled NBR and NR composites. Science and Technology for Sustainable Development 1, 259. [2006]

Conference paper | 2006

**T254** M Idicula, K Joseph, S Thomas, Development of banana/sisal hybrid fibre reinforced polyester composites-resin transfer molding and compression molding. Science and Technology for Sustainable Development 1, 195 [2006]

Conference paper | 2006

**T255** E Tomlal Jose, K Joseph, Studies on commingled polypropylene/glass fiber composite systems. Science and Technology for Sustainable Development 1, 245 [2006]

Conference paper | 2006

**T256** K Jayanarayanan, K Joseph, S Thomas, Preparation and properties of microfibrillar based polymer-polymer composites. Science and Technology for Sustainable Development 1, 226. [2006]

Conference paper | 2006

**T257** PA Sreekumar, P Albert, PV Anilkumar, G Unnikrishnan, K Joseph, Mechanical studies of ecofriendly banana fibre reinforced polyester composites.Science and Technology for Sustainable Development 1, 237. [2006]

Conference paper | 2006

**T258** ES De Medeiros, JA Agnelli, K Joseph, LH De Carvalho, LH Mattoso, Characterization of Phenolic Composites Reinforced With Jute/Cotton Hybrid Fabrics (1126).Antec-conference proceedings- 3, 3979-3983, [2002]

Conference paper | 2002

**T259** K Joseph, LHC Mattoso, Recent Developments In Natural Fibre Based Polymer Composites.Fourth International Symposium on Natural Polymers and Composites, 1-13 [ 2002]

Conference paper | 2002

**T260** K Joseph, LHC Mattoso, Sisal fibre reinforced polymer composites: status and future, ISNaPol/2000: Third International Symposium on Natural Polymers and ...[2000]

Conference paper | 2000

**T261** K Joseph, LH De Carvalho, Jute/cotton woven fabric reinforced polyester composites: effect of hybridization, ISNaPol/2000: Third International Symposium on Natural Polymers and ...[2000]

Conference paper | 2000

**T262** Meegle S Mathew and Kuruvilla Joseph. " Fluorescent Nanomaterials for Biosensing" presented on MRSI at IIST.

Conference paper | Undated

ACADEMIC RECORD / 13

# Record notes & source directory

## Edition and provenance

Compiled 26 November 2026 from the verified academic record, drawing on the September 2026 professional CV, institutional records, publisher pages and later confirmed updates. The selected talks include the two lectures at the University of Borås during the 26-30 October 2026 research visit, documented in the host's account.

Registrar service concluded on 30 September 2026. Dean (Academics) is recorded as February 2024-February 2026. Current appointments in this edition are Distinguished Professor and first Pro-Vice Chancellor of IIST.

Research indicators are the October 2026 figures already published on the website; no new citation count, publication date, project date or student status has been inferred.

## Scope of scholarly and supervision lists

The publication sections reproduce 228 journal articles and reviews and 56 book chapters. The broader career overview reports 250+ journal papers. Publication types are not combined to create a new journal total, and missing papers are not invented to close the difference.

The programme directory contains 58 selected stage-specific records: two postdoctoral, 28 doctoral and 28 master's entries. The career total of 22 doctoral graduates is retained separately; the named list contains 20 doctoral entries marked degree awarded and eight marked ongoing in an older source record. The latter status is not a claim of current enrolment. Where identities or dates could not be reconciled reliably, the existing source distinctions remain.

Completed research projects are undated in the supplied record. No approximate decade, budget or principal-investigator role has been assigned without evidence. Institutional contributions include collaborative work, recommendations and work in progress, distinguished in the text.

## Public record and live catalogues

University of Borås research visit: host account
https://www.linkedin.com/posts/mikaelskrifvars_visit-from-indian-institute-of-space-science-share-7522769328589488128-IEP4/

Biography and career
https://kuruvillajoseph.com/profile

Research directions and collaborators
https://kuruvillajoseph.com/research

Sponsored research projects
https://kuruvillajoseph.com/projects

Full IIST institution-building account
https://kuruvillajoseph.com/iist-contributions

Teaching and materials education
https://kuruvillajoseph.com/teaching

Research group and programme records
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https://kuruvillajoseph.com/patents

Selected talks and conferences
https://kuruvillajoseph.com/talks

Official IIST Pro-Vice Chancellor profile
https://www.iist.ac.in/pro-vice-chancellor

Official IIST faculty record
https://www.iist.ac.in/people-faculty-profile/kuruvilla-joseph

Google Scholar
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