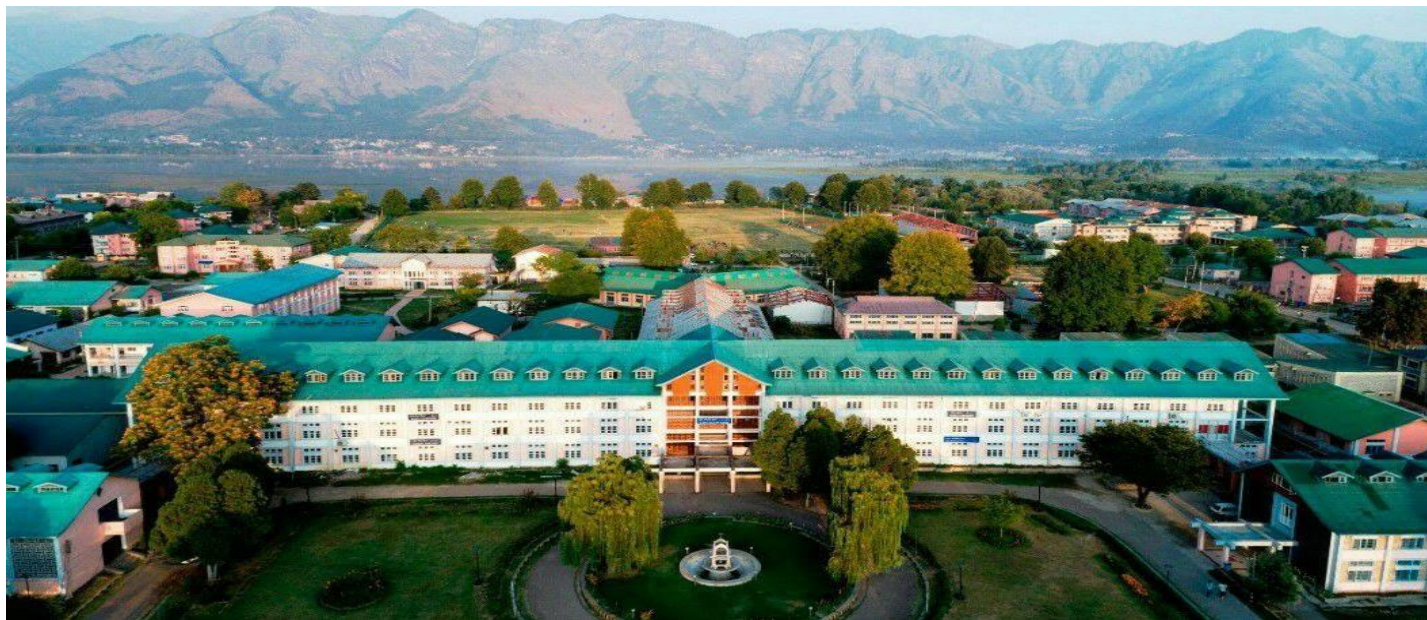




iDREAM *Centre of Excellence (CoE)*

Interdisciplinary Division for Renewable Energy & Advanced Materials
National Institute of Technology Srinagar, J&K, India—190006

Inspired by SERB & DST via Reverse Brain Drain Schemes



NIT Srinagar



iDREAM

Centre of Excellence (CoE)

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[Home](#)[About iDREAM](#)[Faculty](#)[iDREAM Enrichment](#)[News](#)[Contact](#)

NIT-Srinagar sanctioned the establishment of iDREAM in its` Board of Governors (BoG) meeting held on 28/06/2019 through the resolution number 06/99. The vision & mission of IDREAM was proposed by **Prof. (Dr.) Kowsar Majid, Dr. Javed Ahmad Banday, Dr. Saifullah Lone (Ramanujan Fellow/Scientist “D”), & Dr. Abdul Wahid Malik (Inspire Faculty)**. The division was approved by the Hon'ble director **Prof. (Dr.) Rakesh Sehgal** on 28th of June, 2019.

The CoE (i.e., iDREAM) is aimed to pursue interdisciplinary research across disciplines. As proposed, the core research areas at iDREAM will remain focused towards the present-day challenges of the region in **energy storage, safe drinking water harvesting, exploration of biodiversity, healthcare, & environmental sustainability**. In near future, the division will offer PhD programs in a wide range of areas & will build a close collaboration with industry & premier Research Institutes of India & Abroad. Currently, iDREAM team is engaged in establishing the characterization laboratories that will cater to material, electronic, mechanical, chemical, thermal, & optical characterization.

Paradigm Shift—Reverse brain drain momentum in India

Reverse Brain Drain Schemes are initiated by the government of India to—hold back young scientist from leaving the country/or bringing back her overseas scientists for nation building.



A screenshot of The Economic Times website. The headline is "373 Indian scientists from foreign institutes returned home between 2014-16: Government". The article is dated "Aug 02, 2017, 09:41 PM IST". The website also features a "Choose Peace Over" banner and a "JUST LOG ON" button. The top navigation bar includes "Home", "News", "Podcast", "Economy", "Industry", "Politics and Nation", "Defence", "Company", and "International". The left sidebar shows "Benchmarks" with Sensex at 35,843.70 and NSE Gainer-Large Cap at 103.65. The right sidebar shows "NSE Loser-Large Cap" with Ruchi Soya Inds at 1,237.85 and a "FEATURED FUND" section for Mirae Asset Tax S Direct-Growth.

373 Indian scientists from foreign institutes returned home between 2014-16: Government

Of 373 scientists who have returned to India under different programmes, 125 have been absorbed in different institutions.

PTI | Last Updated: Aug 02, 2017, 09:41 PM IST

Save

Why this trend?

1. Long plagued by "brain drain", India has over the last decade ramped up schemes to attract Indian- origin scientists
2. This trend is primarily due to schemes such as the **Ramanujan Fellowship Scheme** and the **Innovation in Science Pursuit for Inspired Research (INSPIRE) Faculty Scheme** and the **Ramalingaswami re-entry fellowship scheme** coordinated by the Department of Biotechnology (DBT)
3. These schemes allow "high-caliber" Indian researchers working abroad to relocate to Indian institutes and universities of their respective interest and domain

iDREAM—Aims & Objectives

- ❑ iDREAM is aimed to Pursue *interdisciplinary research* across several disciplines to remain focused with the present-day challenges of the region in *energy storage, safe drinking water harvesting, exploration of biodiversity, healthcare, & environmental sustainability*.
- ❑ In near future, the division *will offer Masters and PhD Programs* in a wide range of areas & will build a *close collaboration with industry & premier research Institutes of India & Abroad*.
- ❑ Currently, iDREAM team is engaged with the *establishment of characterization laboratories* that will cater to material, electronic, mechanical, chemical, thermal, & optical characterization.



Interdisciplinary Division for Renewable Energy & Advanced Materials
National Institute of Technology (NIT) Srinagar, J&K (UT)



iDREAM Enrichment Program—will remain active throughout the year to connect NIT Srinagar scientists with the outer world in the areas of lecture series, collaborations, research innovations, technological startups, internships, conferences, & job fairs.

iDREAM Science Talks (2020)

From Trinity College Dublin, Ireland

iDREAMtalks
"a journey of thousand science talks....."

Organized by

iDREAM—Interdisciplinary Division for Renewable Energy & Advanced Materials, Department of Chemistry, National Institute of Technology (NIT), Srinagar

Talk #01

Chief Patron
Prof (Dr.) Rakesh Sehgal, Director, NIT, Srinagar

Chairpersons
Prof (Dr.) Kowsar Majid (Dean Academic Affairs), NIT Srinagar
Dr. Javid Ahmad Bandy (HOD Chemistry Department) NIT Srinagar

Coordinators
Dr. Saifullah Lone (Ramanujan Fellow/Scientist –D), Chemistry Department NIT Srinagar
Dr. Malik Abdul Wahid (Inspire Faculty), Chemistry Department, NIT Srinagar

Research Topic: "Nature Inspired Nanomaterials—From Idea to Market"
Speak: Dr. Sajjad Hussain Mir, Marie Curie Fellow, Trinity College, Dublin
Date: 10th September, 2 PM, IST, Zoom Meeting ID: 7278732771, Passcode: 75m5Js
Note: iDREAMtalks will remain online during the COVID-19 pandemic; afterwards, venue will be NIT Srinagar

From Kashmir University

iDREAMtalks

"A Journey of thousand Science talks....."

Organized by iDREAM — Interdisciplinary Division for Renewable Energy & Advanced Materials, a Centre of Excellence (CoE) at National Institute of Technology (NIT) Srinagar, India, 190006

Talk #05

Speaker: Dr. Ajiaz Ahmad Dar
PhD from Department of Chemistry, IIT- Bombay
Affiliation: Assistant professor, Department of Chemistry, University of Kashmir, Srinagar
Research Topic: "Crystal Engineering of Organic Molecules"

Wednesday: 27th October 2:30 pm IST
Join — Google Meet: <https://meet.google.com/ini-czur-xtq>

Chief Patron — Prof (Dr.) Rakesh Sehgal, Director, NIT, Srinagar

Chairpersons — Prof (Dr.) Kowsar Majid (Dean Academic Affairs), NIT Srinagar
— Dr. Javid Ahmad Bandy (HOD Chemistry Department) NIT Srinagar

Coordinators — Dr. Saifullah Lone (Ramanujan Fellow/Scientist –D), Chemistry Department NIT Srinagar
— Dr. Malik Abdul Wahid (Inspire Faculty), Chemistry Department, NIT Srinagar

From POSTECH, South Korea

iDREAMtalks

"A Journey of Thousand Science Talks....."

Time: Sep 23, 2020 02:00 PM India
Zoom Meeting ID: 727 873 2771
Pass code: 75m5Js

Speaker: Dr. Amit Kumar, Research Professor
Affiliation: National Creative Research Initiative Center for Nanospace-Confined Chemical Reactions, Department of Chemistry, Pohang University of Science & Technology (POSTECH), South Korea
Postdoctoral Fellow: Seoul National University, South Korea
Postdoctoral Fellow: City University of New York, USA
PhD in Organic Synthesis: IIT Kanpur
MSc Chemistry: IIT Roorkee

Journal Cover Highlights

Talk #02

Research Topic: Craftsmanship at Catalytic Nanoreactors—Awe-inspiring Design for Diverse Applications

Chief Patron Prof (Dr.) Rakesh Sehgal, Director, NIT, Srinagar

Chairpersons Prof (Dr.) Kowsar Majid (Dean Academic Affairs), NIT Srinagar
Dr. Javid Ahmad Bandy (HOD Chemistry Department) NIT Srinagar

Coordinators Dr. Saifullah Lone (Ramanujan Fellow/Scientist –D), Chemistry Department NIT Srinagar
Dr. Malik Abdul Wahid (Inspire Faculty), Chemistry Department, NIT Srinagar

From Department of Space, Government of India

iDREAMtalks

"a journey of thousand science talks....."

Organized by iDREAM — Interdisciplinary Division for Renewable Energy & Advanced Materials, a Centre of Excellence (CoE) at National Institute of Technology (NIT) Srinagar, India, 190006

Talk #06

Speaker: Sri H. S. Jatana
Affiliation: Scientist "G"; Group Head — Design & Process Grp Semi-Conductor Laboratory (SCL), Department of Space, Govt. of India
Research Topic: "Future Trends in Electronics & Semiconductors"

Tuesday: 3rd November, 10:30 am IST
Zoom Meeting Link: <https://us04web.zoom.us/j/73978046512?pwd=enhEZF12Qm9yYXpWZWZlaFc1UmpsZz09>
Meeting ID: 739 7804 6512, **Passcode:** iDREAM2020

Chief Patron — Prof (Dr.) Rakesh Sehgal, Director, NIT, Srinagar

Chairpersons — Prof (Dr.) Kowsar Majid (Dean Academic Affairs), NIT Srinagar
— Dr. Javid Ahmad Bandy (HOD Chemistry Department) NIT Srinagar

Coordinators — Dr. Saifullah Lone (Ramanujan Fellow/Scientist –D), iDREAM, NIT Srinagar
— Dr. Malik Abdul Wahid (Inspire Faculty) iDREAM, NIT Srinagar

From IUST JK & Harvard Medical School, USA

iDREAMtalks

"A Journey of Thousand Science Talks....."

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Talk #03

Speaker: Dr. Manzoor Ahmad Dar
Assistant Professor
Department of Chemistry, Islamic University of Science and Technology (IUST) Awantipora Jammu and Kashmir, India
Research Topic: "Density Functional Theory as a Tool to Simulate the Reactivity and Catalytic Properties of Materials"

Talk #04

Speaker: Dr. Shabir Hassan
Research Scientist, Harvard Medical School
Associate Editor, MIT Science Policy Review
Incoming Faculty (January 2021) Harvard Boston, USA
Research Topic: "Hacking Bioengineering—Matching up to Big Labs"

Wednesday: 14th October 1:30 pm IST
<https://us04web.zoom.us/j/20163305047?pwd=SDBoTUZc3dvVXdsQjFzTWVWZWVudD09>
Meeting ID: 201 633 0504
Passcode: iDREAM2020

Wednesday: 14th October 8:00 pm IST
<https://us04web.zoom.us/j/20163305047?pwd=SDBoTUZc3dvVXdsQjFzTWVWZWVudD09>
Meeting ID: 201 633 0504
Passcode: iDREAM2020

Chief Patron — Prof (Dr.) Rakesh Sehgal, Director, NIT, Srinagar

Chairpersons — Prof (Dr.) Kowsar Majid (Dean Academic Affairs), NIT Srinagar
— Dr. Javid Ahmad Bandy (HOD Chemistry Department) NIT Srinagar

Coordinators — Dr. Saifullah Lone (Ramanujan Fellow/Scientist –D), Chemistry Department NIT Srinagar
— Dr. Malik Abdul Wahid (Inspire Faculty), Chemistry Department, NIT Srinagar

From IISER Pune

iDREAMtalks

Organized by iDREAM — Interdisciplinary Division for Renewable Energy & Advanced Materials, a Centre of Excellence (CoE) at National Institute of Technology (NIT) Srinagar, India, 190006

Talk #07

Zoom Meeting Details

Meeting ID: 762 5361 0507
Passcode: A7g2cW
Tuesday: 05th Nov; Thursday, 2:00 pm IST
Zoom Meeting Link: <https://us04web.zoom.us/j/76253610507?pwd=U3Z4VURZQXpRRGloV0RyWVYUVDVEUT09>

Speaker: Dr. Shabana Khan, Associate Professor & Deputy Chair
Affiliation: Department of Chemistry, Indian Institute of Science Education & Research (IISER) Pune, India
Research Topic: Synthesis & Application of Low-valent Compounds—Development of Superior Catalysts

Chief Patron — Prof (Dr.) Rakesh Sehgal, Director, NIT, Srinagar

Chairpersons — Prof (Dr.) Kowsar Majid (Dean Academic Affairs), NIT Srinagar
— Dr. Javid Ahmad Bandy (HOD Chemistry Department) NIT Srinagar

Coordinators — Dr. Saifullah Lone (Ramanujan Fellow/Scientist –D), Chemistry Department NIT Srinagar
— Dr. Malik Abdul Wahid (Inspire Faculty), Chemistry Department, NIT Srinagar

iDREAM Science Talks (2020)

From Canada

iDREAMtalks

Organized by iDREAM — Interdisciplinary Division for Renewable Energy & Advanced Materials, a Centre of Excellence (CoE) at National Institute of Technology (NIT) Srinagar, India, 190006



TALK #08

Topic: The Art of Science Writing

Speaker: Olena Shynkaruk, Ph.D.

Dr. Olena is a freelance science writer and editor with love for languages. She is a Ukrainian Canadian who has studied, worked, and presented internationally. Her experience as a science communicator includes grant writing, manuscript editing, copywriting, and working as a contributing writer for Lab Manager magazine.

Audience: Masters & Ph.D. Students of NIT Srinagar, IUST, Kashmir University, Central University of Kashmir & Cluster University, Srinagar

Thursday: 19th Nov; 8:30 pm IST
Google meeting link: meet.google.com/ani-tfrv-owt



- ❑ **Chief Patron** — Prof. (Dr.) Rakesh Sehgal, Director, NIT, Srinagar
- ❑ **Chairpersons** — Prof. (Dr.) Kowsar Majid (Dean Academic Affairs), NIT Srinagar
— Dr. Javid Ahmad Bandy (HOD Chemistry Department) NIT Srinagar
- ❑ **Coordinators** — Dr. Saifullah Lone (Ramanujan Fellow/Scientist-D), Chemistry Department NIT Srinagar
— Dr. Malik Abdul Wahid (Inspire Faculty), Chemistry Department, NIT Srinagar

From Sweden & Germany

iDREAMtalks

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Interdisciplinary Division for Renewable Energy & Advanced Materials, a Centre of Excellence (CoE) at National Institute of Technology (NIT) Srinagar, India, 190006



Talk #09

Speaker: Jameel Barkat, PhD
Position: Postdoctoral Research Fellow
University of Gothenburg, Sweden
PhD: Daegu University, South Korea
iDREAM Talk Title: **The Color of Fat: Fighting Fat With Fat**
Time: Wednesday, 25th November, 3:00 pm IST
Google link: <https://meet.google.com/rhj-abtw-ypd>



Talk #10

Speaker: Bilal Ahmad Mir, Ph.D.
Position: Postdoctoral Research Fellow
Leibniz Institute for Farm Animal Biology (FBN), Germany
PhD: Deakin University, Australia, 2019
iDREAM Talk Title: **Treating Diseased/Paralyzed Skeletal Muscle-ALS/ Optogenetics**
Time: Wednesday, 25th November, 4:30 pm IST
Google link: <https://meet.google.com/rhj-abtw-ypd>



- ❑ **Chief Patron** — Prof. (Dr.) Rakesh Sehgal, Director, NIT, Srinagar
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- ❑ **Coordinators** — Dr. Saifullah Lone (Ramanujan Fellow/Scientist-D), Chemistry Department NIT Srinagar
— Dr. Malik Abdul Wahid (Inspire Faculty), Chemistry Department, NIT Srinagar

From Italy

iDREAMtalks

"A Journey of Thousand Science Talks....."

Organized by iDREAM — Interdisciplinary Division for Renewable Energy & Advanced Materials, a Centre of Excellence (CoE) at National Institute of Technology (NIT) Srinagar, India, 190006



Talk #11

Speaker: Dr. Tilak Das, PhD
Position: Senior Researcher
University of Milano-Bicocca, Milan, Italy (2018 - Present)
PhD: University of Nantes, France
iDREAM Talk Title: **Computational Photo-Catalysis in Materials Science: (i) Bulk and (ii) 2-dimensional Solids**
Time: Saturday, 5th December, 2:00 pm IST
Zoom Meeting: <https://us04web.zoom.us/j/2014535044?pwd=SEB6dGtUZWp4dVZkdSc1NlR0p3ZWwv>
Meeting ID: 201 633 0504
Passcode: IDREAM2020

- ❑ **Chief Patron** — Prof. (Dr.) Rakesh Sehgal, Director, NIT, Srinagar
- ❑ **Chairpersons** — Prof. (Dr.) Kowsar Majid (Dean Academic Affairs), NIT Srinagar
— Dr. Javid Ahmad Bandy (HOD Chemistry Department) NIT Srinagar
- ❑ **Coordinators** — Dr. Saifullah Lone (Ramanujan Fellow/Scientist-D), Chemistry Department NIT Srinagar
— Dr. Malik Abdul Wahid (Inspire Faculty), Chemistry Department, NIT Srinagar



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On

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21st to 26th SEP 2020

Organized by
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STTP-SPEAKERS

Dr. C. Senthil Selvan
Radiological Safety Officer (RSO)
Mahatma Gandhi Medical College And Research Institute, Puducherry.
Session-I 10:30 AM to 12:00 PM
Application of Radiation in Health Care Environment

Dr. Saifullah Lone
Ramanujan Faculty & Co-Founder of iDREAM
National Institute of Technology, Srinagar.
Session-II 1 to 2:30 PM
Disruption in Engineering Education

Dr. Evangeline D
Assistant Professor
Ramaiah Institute of Technology, Bangalore
Session-III 4 to 5:30 PM
How to Write a Technical Book?

SEP 25, 2020
DAY 5 FLYER

GOVERNMENT OF JAMMU AND KASHMIR J & K SCIENCE TECHNOLOGY & INNOVATION COUNCIL DEPARTMENT OF SCIENCE AND TECHNOLOGY 5 B/C Gandhi Nagar Jammu, e-mail jkstic89@gmail.com **ADVERTISEMENT**

Breakthrough discoveries cannot change the world if they do not leave the laboratories. In this regard, the J&K Science, Technology & Innovation Council (Union Territory of J&K) in partnership with iDREAM (Interdisciplinary Division for Renewable Energy & Advanced Materials), a Centre of Excellence (CoE) at NIT, Srinagar - is launching an "Innovation Challenge" event for talented young brainpower of J&K to "transform ideas into self-employment/or small scale technology-based business." This initiative is aimed to focus on the challenges of contemporary Knowledge-To-Technology-Transfer. Innovation Challenge will be completed into two stages

- Selection of the ideas from practical demonstrations by participants/teams.
- Allocating seed money to take ideas to market under the constant monitoring of iDREAM faculty.

Eligibility: This is an open challenge; the level of education is irrelevant; hence, anyone/or team with any age group having an innovative ideas is encouraged to apply.

Submission: The proposed idea (hard copy) should be submitted to the office of undersigned at JK Science, Technology and Innovation Council, SDA Colony, Bemina, Srinagar (Tawanai Ghar) and 5B/C, Gandhi Nagar, Jammu on or before 24-12-2020, 5:00 pm and soft copy through mail (jkstic89innovation@gmail.com). The application form should be accompanied with two passport size photographs of the applicant (For further details/query please contact on Mob. 9419196296 (Jammu) and 9796301630 (Srinagar)).

In 2020 iDREAM Enrichment Program invited speakers from:

Ireland, South Korea, United States, Canada, Sweden, Germany, Italy, & India

We are determined to make iDREAM truly a research centre of international repute.....

Current iDREAM building



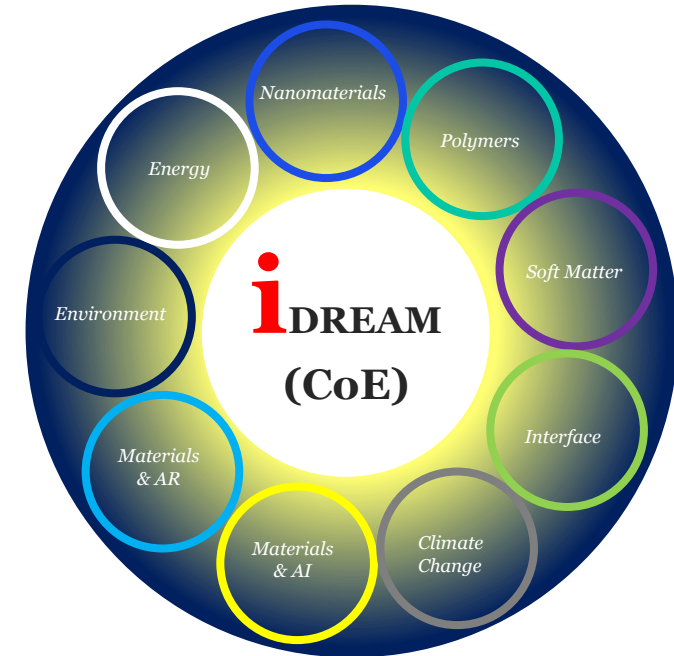
We thank NIT Srinagar for providing us a launching pad to take-off for better research and service of the nation.”

Acknowledgement



iDREAM team is grateful to;

1. The honorable director, NIT Srinagar (*i.e. Prof. (Dr.) Rakesh Sehgal*) for providing us a unique chance to make a disruptive step into the enriching future of the region in the arena of science and technology.
2. The **Government of India** for providing tenure tract positions to our are faculty fellows (i.e., Ramanujan Fellow & Inspire Faculty) *via DST & SERB organizations* .



Thank you for giving us a chance to dream!