

United Nations
Educational, Scientific and
Cultural Organization



• क्षेत्रीय जैव प्रौद्योगिकी केन्द्र
• Regional Centre
• for Biotechnology

Regional Centre for Biotechnology

A UNESCO Category II Centre | Institution of National Importance

Presents

BioPulse

The rhythm of research, innovation, and impact at RCB



MAR-MAY 2026, ISSUE 4

Regional Centre for Biotechnology



Academic Highlights

PhD Viva-Voce

25 March 2026 | Ms. Shivani Balyan
08 April 2026 | Ms. Swathik Clarancia P
27 April 2026 | Ms. Varsha Saini
28 April 2026 | Mr. Jaydeep Sharma
30 April 2026 | Ms. Sheenu

04 May 2026 | Mr. Suman Saurav
18 May 2026 | Ms. Sakshi Khera
20 May 2026 | Mr. Vinay Sharma
25 May 2026 | Ms. Poonam Ray

Visit of Delegation from the India Korea Center for Research and Innovation (IKCRI) 29 April 2026



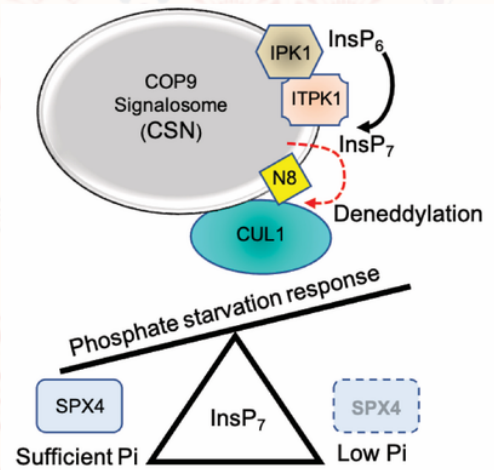
Research Highlights

Arabidopsis inositol polyphosphate kinase activities regulate COP9 deneddylation functions in phosphate homeostasis

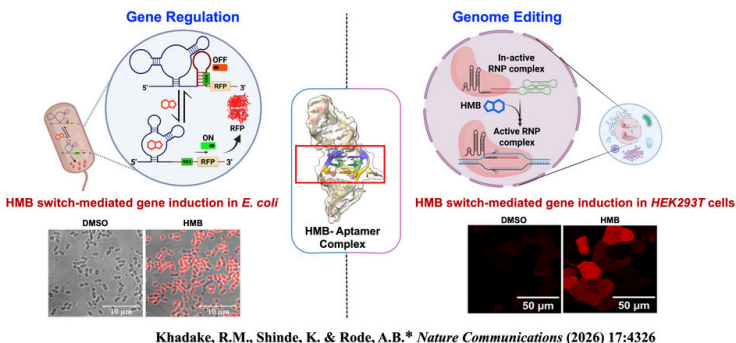
This collaborative work from Dr. Saikat Bhattacharjee's Lab, published in the Journal of Integrative Plant Biology, provides new insights on phosphate starvation response (PSR) modulation.

Reference:

Walia, Y., Noopur, M., Bhattacharya, I., Sahoo, B.C., Kasera, M., Pullagurla, N.J., Dutta, S., Liu, G., Schaaf, G., Jessen, H. and Laha, D. *Journal of integrative plant biology* (2026).



Advancing Synthetic Biology Tools : HMB-Riboswitches for Conditional Gene Regulation & Editing



Engineering ligands for theophylline riboswitches expands its regulatory dynamic range in prokaryotic and eukaryotic systems

A recent study published in Nature Communications where Dr. Ambadas B. Rode's group has engineered a new class of synthetic ligands that significantly outperform the original theophylline ligand in affinity, cell penetration and induction.

Reference:

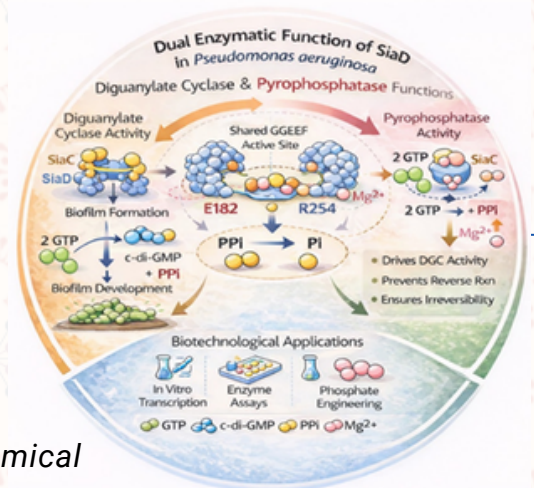
Khadake, Rushikesh M., Krushna Shinde, and Ambadas B. Rode. *Nature Communications* (2026).

Novel enzymatic activity of SiaD, a DGC of Pseudomonas aeruginosa

A recent study, published in Biochemical and Biophysical Research Communications from Dr. Deepti's lab, uncovers an unexpected function of one of the key proteins SiaD, otherwise involved in biofilm formation in *Pseudomonas aeruginosa*.

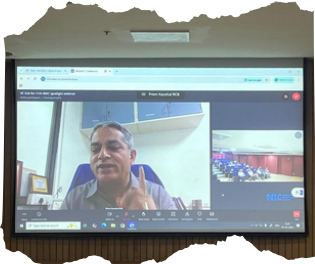
Reference:

Adhikary, Anirban, Moumita Ghosh, and Deepti Jain. *Biochemical and Biophysical Research Communications* (2026).





News and Events



❖ RCB Foundation Day was celebrated on 2 March 2026 in the presence of Dr. Vijay Chauthaiwale (Guest of Honour; Member, DBT-BRIC Governing Body) and Prof. Shekhar C. Mande (Chief Guest; President, INSA). The event featured a flash talk competition among RCB students and a Kathak recital by Pt. Rajendra Gangani (Sangeet Natak Akademi Awardee and recipient of the Sangeet Raj Award).



❖ On 7 March 2026, as part of the 11th iBRIC+ Biotech Spotlight webinar, Dr. Prem Singh Kaushal delivered a talk titled "Cryo-EM Studies on Protein Synthesis in Pathogenic Microbes," highlighting recent advances in understanding protein synthesis mechanisms through cryo-electron microscopy.

❖ RCB celebrated International Women's Day on 9 March 2026 with an insightful talk by former staff scientist and activist Dr. Vineeta Bal. Women employees were felicitated for their hard work and dedication, followed by fun-filled games and activities involving women staff from across RCB.



❖ RCB welcomed Dr. Shivkumar Kalyanaraman, CEO of the Anusandhan National Research Foundation (ANRF), on 19 March 2026 for an in-depth visit that included interactions with the leadership, faculty, and students, along with a tour of key facilities such as the BBB, ATPC, and IBDC.

❖ A Science Writing Workshop was organized for senior research scholars of RCB from 6–9 April 2026. Coordinated by Dr. Prashant Pawar and Dr. Karthigeyan Dhanasekaran, the workshop featured experts from Editage-Cactus Publications, who trained participants in manuscript writing and the ethical use of AI in scientific communication.



❖ As part of their coursework, PGDIB students visited the Indian Pharmacopoeia Commission, Ghaziabad, and the National Institute of Biologicals, Noida, on 15 and 17 April 2026, respectively.

❖ Mr. Vishal Agnani, a Ph.D. scholar under the supervision of Dr. C. V. Srikanth, was awarded the prestigious Fulbright-Nehru Doctoral Research Fellowship on 22 April 2026.



❖ On 23 April 2026, a delegation from the Embassy of France, New Delhi, comprising Dr. Sylviane Pied and Dr. Meenakshi Singh, visited RCB to discuss opportunities for strengthening research collaborations with French institutions. The visit concluded with a tour of RCB's research and technology facilities.





❖ On 29 April 2026, a delegation from the India Korea Center for Research and Innovation (IKCRI), comprising Prof. Han Woo Lee (Founder & CEO, Gemcro Inc. and Professor Emeritus, Yonsei University), Dr. Young Ho Kim (Director, IKCRI), Dr. Noopur Jain (Senior Scientist, IKCRI), and Ms. Yu Kyoung Lee (Operations Manager, IKCRI), visited RCB to discuss existing collaborations and explore new opportunities for research partnerships between Korean institutions and RCB.



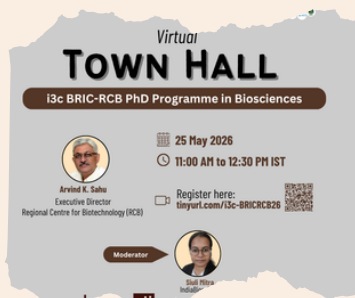
❖ On 30 April 2026, RCB hosted a workshop on “SARAL AI: Democratising Scholarly Work by Transforming it into Accessible, Multilingual Content,” led by Prof. P. Kumaraguru, IIIT Hyderabad (PI, SARAL AI).

❖ Swachhata Pakhwada was observed from 1–15 May 2026 at RCB through the Swachhta Pledge, a plantation drive, and the distribution of sustainable cloth bags to staff members.



❖ RCB proudly participated in National Technology Day on 11 May 2026 at BRIC-NII. Dr. Nidhi Adlakha and Dr. Ramu Vemanna showcased technologies developed in their respective laboratories. Dr Nidhi’s group demonstrated an innovative platform to develop low phenylalanine formulation for patients suffering from phenylketonuria. Dr Ramu’s group showcased a technology to enhance the crop yield and boost agricultural produce and a foliar spray mediated RNP approach to combat bacterial diseases of crops, next generation crop protection biological solution.

❖ On 13 May 2026, RCB, in collaboration with Rotary Club Faridabad, organized a Blood Donation Camp, encouraging voluntary blood donation and promoting community welfare.



❖ On 25 May 2026, RCB, in association with IndiaBioscience, hosted a virtual Townhall for prospective applicants to the i3c BRIC-RCB Ph.D. Programme in Biosciences. The session introduced the programme and provided a platform for participants to clarify their queries regarding admissions and the application process.



Talks at RCB

RCB SEMINAR SERIES

06 March 2026 | Dr. Giriraj Chandak, JC Bose Fellow, CSIR-CCMB, Hyderabad, delivered a lecture titled, '*Is Genetics the Boon or Bane of Non-communicable diseases (NCDs): Role of Environment in NCD Susceptibility*'

07 April 2026 | Dr. Naveen Kumar, Director, ICMR-NIV, Pune delivered a talk on World Health Day as a part of RCB Seminar Series 2026, titled, '*A Landmark in Lumpy Skin Disease Vaccinology: Development of the First DIVA Marker Vaccine—Science, Struggle, and Policy*'

29 April 2026 | Prof. Han Woo Lee (Founder and CEO, Gemcro Inc.; Professor Emeritus, Yonsei University, South Korea) delivered a talk, titled, '*Reinforcing Mouse Models of Human Diseases*'

21 May 2026 | Dr. Sudip Mandal, Professor at IISER-Mohali, delivered a stimulating lecture titled, '*Regulation of hematopoietic niche by differentiating blood cells in Drosophila*'

Aspiring Faculty Talks

06 April 2026 | Dr. Debasmita Ghosh (Postdoctoral Fellow Weizmann Institute of Science, Israel) delivered a talk titled, '*Biomolecular Folding, Ensembles, and Interactions Through the Lens of Native Mass Spectrometry*'

09 April 2026 | Dr. Sundaram Acharya (JSPS Postdoctoral Fellow University of Tokyo) delivered a talk titled '*Engineering non-canonical CRISPR systems*'

15 April 2026 | Dr. Ritu Singh (Postdoctoral Research Scholar Department of Plant Sciences, University of California, Davis) delivered a talk titled '*From Specialist to Generalist: Decoding Fungal Virulence Strategies and Plant Immune Diversification*'



17 Mar 2026 | Biotechnology and Microbiology B.Sc. students from G D Goenka University explored the Advanced Technology Platform Centre (ATPC) and the Indian Biological Data Centre (IBDC), gaining exposure to cutting-edge research facilities and high-end analytical instrumentation.



25 Mar 2026 | Undergraduate Students from Shree Guru Gobind Singh Tricentenary University, Gurugram (Department of Neuroscience) visited RCB'S key facilities. They were also introduced to RCB's academic and research programmes, providing them with valuable insights into cutting-edge biotechnology research and innovation happening in the campus.



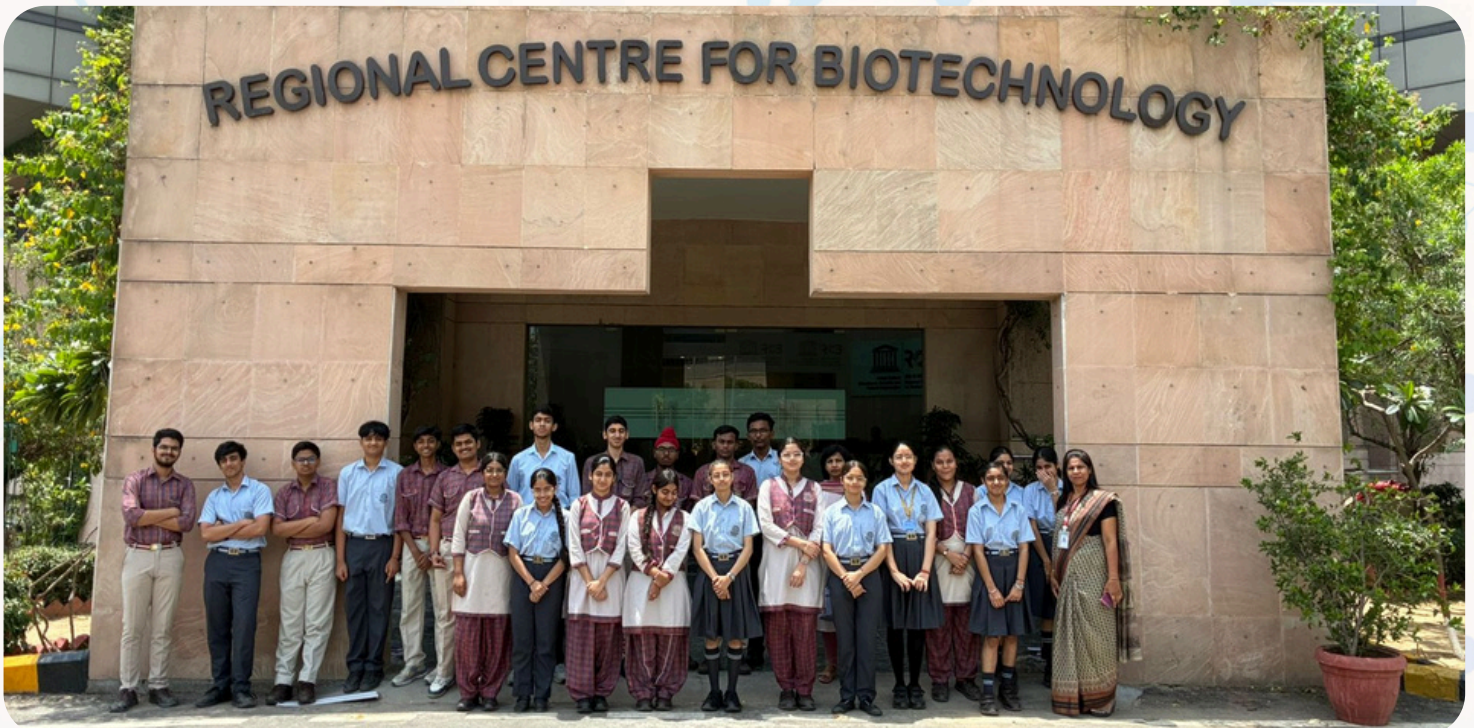
13 Apr 2026 | B.Sc. (Hons) Forensic Science students from KR Mangalam University visited RCB. They were introduced to RCB's research and academic programmes and toured facilities including the Greenhouse, ATPC, and IBDC.



16 Apr 2026 | B.Tech Biotechnology students from NIIT University Neemrana visited the Advanced Technology Platform Centre (ATPC) and the Indian Biological Data Centre (IBDC), gaining exposure to cutting-edge research facilities and high-end analytical instrumentation.



06 May 2026 | Students of class XI and XII of Euro Kids International School, Sector-45, Faridabad, visited RCB's key facilities and Dr Prashant Pawar's lab. They were also introduced to RCB's academic and research programmes, providing them with valuable insights into cutting-edge biotechnology research and innovation happening in the campus.



14 May 2026 | RCB hosted students and faculty from DAV Gian Prakash Chopra Public School Sector 49, Faridabad, for an academic visit. Participants were introduced to RCB's research and academic programmes and toured facilities including the Greenhouse, ATPC, and IBDC.



Upcoming Events

Alumni Talk Series 25 June 2026



Ms. Sonia Trikha
Final Year PhD Candidate
Gulbenkian Institute for Molecular Medicine, Portugal

Talk Title

Age-dependent metabolic adaptation to SARS-CoV-2 infection

Date: 25.6.2026
Time: 2.30 PM
Venue: RCB Seminar Hall-II

- Title: Age-dependent metabolic adaptation to SARS-CoV-2 infection
- Speaker: Ms. Sonia Trikha (Final Year PhD student at Gulbenkian Institute for Molecular Medicine, Portugal)
- Masters under the supervision of Prof. Sudhanshu Vratil

ONLINE OPEN WEBINAR
i3c BRIC-RCB Ph.D. Programme in Biosciences (2026-2027)
Application Deadline for the course: 8 June 2026

WEBINAR HIGHLIGHTS:

- Programme overview
- Eligibility & Selection
- Application process
- Benefits of joining
- Research opportunities
- Q & A session

Open to all!

5 June 2026 (Friday) | 11:00 AM-12:30 PM

Join us: Meeting ID: 838 5716 8350 | Passcode: Rcb@2026

Awareness Session on Prevention of Sexual Harassment (POSH) at the Workplace

Creating Safe and Inclusive Workplaces: Gender Sensitization & POSH Compliance

Speaker: Prof. Ritu Gupta
Dean, Faculty of Legal Studies
Director, Centre for International Collaborations & Outreach
South Asian University, New Delhi

17 June 2026 (Wednesday) | 2:30 PM Onwards | Seminar Hall-2, RCB

Open Webinar i3c BRIC-RCB Ph.D. Programme in Biosciences (2026-2027) 5 June 2026

To help prospective applicants learn more about the programme, we are organizing an online webinar covering the programme structure, eligibility criteria, application process, research opportunities, and benefits of joining the programme.

Expert Talk Creating Safe and Inclusive Workplaces 17 June 2026

A talk by Prof. Ritu Gupta, Professor of Law at Faculty of Legal Studies (FLS) South Asian University. The talk will focus on raising awareness about various aspects of POSH guidelines to ensure a safe and secure workplace.

Regional Centre for Biotechnology,
NCR Biotech Science Cluster Faridabad Gurugram Expressway, Haryana – 121001
www.rcb.res.in

TESTIMONIALS



The visit to RCB, Faridabad was a really inspiring experience for me. I had studied SEM, TEM, and other technologies in my Biomedical Engineering subject, but seeing them in real life and understanding their actual research applications was truly exciting.

- **Vrunda Delwadiya, 3rd Year B.Tech Biotechnology NIIT University, Neemrana**

Visiting this campus is always interesting. It is a big and happening place now on many fronts. I hope it continues to expand in terms of human & other resources, fulfilling the mandate.

- **Dr Vineeta Bal ,
Former Scientist
National Institute of Immunology**



As a PGDIB student, I've gained a 360-degree view of the biotech and pharmaceutical landscapes, from the intricacies of drug discovery and development to stringent regulatory compliance. RCB hasn't just educated me, but it is evolving me into a future-ready scientist, proud to serve our invincible and beloved Nation.

- **Premraj Ware, PGDIB 2026**



Alumni Speaks



I completed my PhD at RCB under the supervision of Dr. Saikat Bhattacharjee. My time at RCB was both professionally enriching and personally transformative. The institute provides an excellent research environment that is not only intellectually stimulating but also highly supportive and collaborative. Beyond fostering strong scientific skills, it encourages personal growth and helps shape individuals. I am grateful for the guidance, opportunities, and supportive community that played a significant role in shaping my journey.

- **Shradha Dahale, PhD student from 2016-22**

(Currently a post-doc fellow National Institute of Agricultural Botany, Cambridge, UK.)