

SCIENTIFIC PROGRAM	
Day 1: Friday, 2nd February, 2024	
TIME	Inauguration Venue: Sir C. V. Raman Auditorium, SGPGIMS, Lucknow
08:00-09:30hrs	Registration
09:30-10:30hrs	Inauguration
10:30-11:30hrs	High Tea
Session-1 Chairpersons- Raja Roy & S. Jayanthi	
11:30-12:10hrs	Inauguration Lecture 1 Prof. Oscar Millet, <i>CIC bioGUNE, Spain</i> Natural history of COVID-19 disease as investigated by NMR-based metabolomics
12:10-12:50hrs	Keynote Lecture 1 Prof. Hartmut Oschkinat, <i>Leibniz-Forschungsinstitut für Molekulare Pharmakologie, Germany</i> Structural and Medical Investigation with dynamic nuclear polarization and protein dynamics in outer membranes
12:50-13:20hrs	Invited Lecture (IL-1) Ernesta Meintjes, <i>University of Cape Town, South Africa</i> Towards motion robust MR imaging and spectroscopy
13:20-14:00hrs	Lunch
14:00 to 17:00hrs	Session-2 Bruker Users' Meeting
	Session-3
	Chairpersons - Vipin Agarwal and Matthias Ernst
17:00-17:40hrs	Plenary Lecture 1 Christian Griesinger, <i>Max Planck Institute for Multidisciplinary Sciences, Germany</i>
17:40-18:20hrs	Plenary Lecture 2 G. A. Nagana Gowda, <i>University of Washington, USA</i> Anomalous Dynamics that Deleteriously Affects Analysis of Unstable Metabolites
18:20-19:00hrs	Plenary Lecture 3 Yusuke Nishiyama, <i>JEOL Ltd, Japan</i> Dynamic and static disorder in NMR crystallography
19:00hrs onwards	Gala Dinner (sponsored by ERA's Lucknow Medical College & Hospital)

Day 2: Saturday, February 03, 2024

09:00 – 11:00hrs	Session-1	Session-2	Session-3
	SS Agarwal Auditorium	DK Chabra Auditorium	SR Naik Auditorium
09:00 - 09:40hrs	Plenary Lecture 4 (PL-4) Prof. Oscar Millet, CICbioGUNE, Spain Prospective metabolomic studies in precision medicine: the Akribea project (SS Agarwal Auditorium relayed online to DK Chabra Auditorium & SR Naik Auditorium) Chairperson - S Senthil Kumaran		
	Chairperson - S Senthil Kumaran	Chairperson - Kavita Dorai	Chairperson - Mandar V Deshmukh
09:40 - 10:10hrs	Invited Lecture (IL-2)	Invited Lecture (IL-3)	Invited Lecture (IL-4)
	Ashish Gupta, <i>CBMR Lucknow,</i> MRI-MRS approach to evaluate Gene Therapy	Matthias Ernst, <i>ETH, Switzerland,</i> Dynamics in Solid-State NMR: How Fast is Fast?	Jeetender Chugh, <i>IISER Pune,</i> Insights into protein aggregation via conformational dynamics
10:10 - 10:40hrs	Invited Lecture (IL-5)	Invited Lecture (IL-6)	Invited Lecture (IL-7)
	Kavindra Nath, <i>University of Pennsylvania, USA</i> Metabolic Modulation Towards Improved Outcome in Cancer Therapy (Online)	Amrit Venkatesh, <i>National High Magnetic Field Laboratory, Florida</i> Rational Design of Polarizing Agents for Dynamic Nuclear Polarization	Bharathwaj Sathyamoorthy, <i>IISER Bhopal,</i> Mapping Structural Polymorphism of DNA G-quadruplexes with NMR Spectroscopy
10:40 - 11:10hrs	(Online IL-1) G. N. Manjunatha Reddy, <i>University of Lille, France</i> Pack and Transport: Importance of Short Range Order in Governing Opto Electronic Properties of Organic Semiconductors.	YFL-1 (10:40-11:00) Babita Behera, <i>Analytical Sciences Division CSIR-Indian Institute of Petroleum, Dehradun</i> Solid State NMR of Cellulose /Grafted Cellulose/ Synthetic Superabsorbent in nonwoven bio-material matrix	YFL-2(10:40-11:00) Payal Gupta, <i>IIT Roorkee</i> Insights into lactic acid tolerance in <i>Candida glabrata</i> vaginal isolates: A metabolomic approach
11:00 - 11:30hrs	Tea Break		
11:30 – 13:10hrs	Session-1	Session-2	Session-3
	SS Agarwal Auditorium	DK Chabra Auditorium	SR Naik Auditorium
11:30 - 12:10hrs	Plenary Lecture 5 (PL-5) Michele Zani, Bruker Biospin Accelerating MRI and Spectroscopy with Maxwell technology (SS Agarwal Auditorium relayed online to DK Chabra Auditorium & SR Naik Auditorium) Chairperson- Uttam Kumar		
	Chairperson – Uttam Kumar	Chairperson - K.V. Ramanathan	Chairperson - Ashutosh Kumar
12:10-12:40hrs	Invited Lecture (IL-8)	Invited Lecture (IL-9)	Invited Lecture (IL-10)
	Christopher D. Kroenke , <i>Oregon Health & Science University, USA</i> Characterizing the glutamate to GABA ratio in the dorsal	Kaustubh R. Mote, <i>TIFR Hyderabad</i> REDOR based methods for accurately quantifying protein	Neel S Bhavesh, <i>ICGEB, New Delhi</i> Choosing partner RRM way

	striatum of mice and monkeys	dynamics and simplifying chemical-shift assignments	
12:40-13:10hrs	Invited Lecture (IL-11)	Invited Lecture (IL-12)	Invited Lecture (IL-13)
	Anant Bahadur Patel, <i>CCMB, Hyderabad</i> 1H-[13C]- NMR Spectroscopic Investigations of Excitatory and Inhibitory Neurotransmission Energetics in Alzheimer's Disease	Sheetal Kumar Jain, <i>IISc, Bengaluru</i> Application of multinuclear solid-state NMR to study sustainable cementitious materials	Aditya Jhajharia, <i>University of Maryland, USA</i> Assessing Lactate Release using Hyperpolarized [1-13C]Pyruvate MR Spectroscopy and Imaging in in vitro and in vivo Models of Epilepsy
13:10 - 15:30hrs	Lunch & Poster Session		
15:30 - 15:45hrs	Tea Break		
15:45 – 16:25hrs	Session: Award Lectures-part I (SS Agarwal Auditorium)		
	Chair: Prof. Neeraj Sinha		
	Prof. C. L. Khetrapal Award Lecture		
	Prof. N. Suryaprakash, NMR, NRC & NSP		
16:25-17:05hrs	Prof. G. Govil Memorial Award Lecture		
	Prof. N. R. Jagannathan, MRI and MRS of Breast Cancer: My Three Decades of Experience		
17:05-17:10hrs	Break		
	Session: Award Lectures-part II (SS Agarwal Auditorium)		
17:10 - 17:40hrs	Prof. H. S. Atreya award Lecture		
	Prof. Krishna Mohan Poluri , IIT Roorkee NMR Investigations on Complex Biomolecular and Biological Systems: Molecular Insights and Translational Aspects		
17:40-18:10hrs	Prof. S. Subramanian's 60th Birthday Lecture Award		
	Prof. Manasi Ghosh, BHU Varanasi		
18:15-18:35hrs	NMRS Jharana Rani Samal Research Scholar Award Lecture		
	Madhurima Kulkarni, IISc Bangalore Exploring excited states of a metamorphic protein in the cyanobacterial circadian clock		
18:35–18:55hrs	Annual NMRS Medal for Young Scientist Presentation		
	Anisha Biswas, CSIR-CFTRI, Mysore Detection of Barley Malt Syrup as an Adulterant in Honey by 1H NMR Profile		
18:55 onwards	Dinner (Banquet at Hotel Centrum sponsored by Bruker)		
	(Buses will take participants from conference venue to hotel)		

Day 3: Sunday, February 04, 2024

09:00 –11:00hrs	Session-1	Session-2	Session-3
	SS Agarwal Auditorium	DK Chabra Auditorium	SR Naik Auditorium
09:00 - 09:40hrs	Plenary Lecture 6 (PL-6) Nico Tjandra, National Institutes of Health, USA Targeting ESCRT-I protein for broad antiviral therapeutics (SS Agarwal Auditorium relayed online to DK Chabra Auditorium & SR Naik Auditorium) Chairperson- Mrignayani Kotecha		
	Chairperson- Mrignayani Kotecha	Chairperson - Yusuke Nishiyama	Chairpersons - Krishna Mohan Poluri & Dinesh Kumar
09:40 - 10:10hrs	Invited Lecture (IL-14)	Invited Lecture (IL-15)	Invited Lecture (IL-16)
	Ganesan Senthil Kumar, <i>National Institute of Immunology, New Delhi</i> Dynamic studies of Antigen-Antibody Interactions of Dengue Virus	Zhehong Gan, <i>National High Magnetic Field Laboratory, USA</i> Pulse sequences and high fields for enhancing the sensitivity and resolution of quadrupolar nuclei NMR	B V N Phani Kumar, <i>CSIR- Central Leather Research Institute, Chennai</i> Imidazolium-Based Ionic Liquids [BMIM][OSU] and [BMIM][Cl] Influence on Binding and Dynamics of the Anti-Cancer Drug Doxorubicin Hydrochloride – A Comprehensive NMR Investigation
10:10 - 10:40hrs	Invited Lecture (IL-17)	Invited Lecture (IL-18)	Invited Lecture (IL-19)
	Uma Sharma, <i>AIIMS New Delhi,</i> The potential of NMR based metabolomics & MRI in understanding pathophysiology of celiac disease and glutenataxia	Vipin Agarwal, <i>TIFR Hyderabad,</i> Characterization of Differences in isostructural Pharmaceutical Pseudopolymorphs using Magic-Angle Spinning Solid-State NMR	Rajesh Sonti, <i>NIPER, Hyderabad,</i> Study on the hydrolytic degradation behaviour of bictegravir by LC-PDA-Q/TOF-MS/MS, NMR and in silico toxicity assessment.
10:40 - 11:10hrs	Invited Lecture (IL-20)	Invited Lecture (IL- 21)	Invited Lecture (IL-22)
	Ashok Sekhar, <i>IISc Bangalore,</i> Conformational frustration at a glycan-protein interface and its implications for function	Kristof Grohe, <i>Bruker Biospin,</i> Fast Magic angle spinning to boost resolution and streamlined data analysis for precise protein structure elucidation and directional molecular dynamics determination	Shilpy Sharma, <i>Savitribai Phule Pune University,</i> Metabolomic insights by NMR spectroscopy into the development of Type 2 Diabetes
11:10 - 11:30hrs	Tea Break		
11:30-12:10hrs	Session-1	Session-2	Session-3
	SS Agarwal Auditorium	DK Chabra Auditorium	SR Naik Auditorium
11:30 - 12:10hrs	Plenary Lecture 7(PL-7) Jordan H.Chill, Bar Ilan University, Israel Flexibility in Seemingly Rigid Protein Domains: NMR – Based Discovery and Implications (SS Agarwal Auditorium relayed online to DK Chabra Auditorium & SR Naik Auditorium)		

	Chairpersons- Anirban Bhunia & Bharathwaj Sathyamoorthy		
12:40hrs	Chairpersons -Anirban Bhunia & Bharathwaj Sathyamoorthy	Chairperson - Matthias Ernst	Chairperson - Bikash Baishya
	Invited Lecture (IL-23)	Invited Lecture (IL-24)	Invited Lecture (IL-25)
	Ashish Arora, <i>CDRI Lucknow,</i> Understanding the structure and dynamics of L. donovani Rab5 proteins	T G AjithKumar, <i>CSIR-NCL, Pune,</i> Structural insights into pharmaceutical compounds from solid-state NMR	Rangeet Bhattacharya, <i>IISER Kolkata,</i> Prethermal discrete time crystal in driven-dissipative dipolar system
12:40-13:10hrs	Invited Lecture (IL-26)	Invited Lecture (IL-27)	Invited Lecture (IL-28)
	Kalyan Chakrabarti, <i>Krea University, Andhra Pradesh</i> Bifurcations in Coupled Aggregation- Inflammation System: Role of Amyloid β 's Modifications in Alzheimer's Disease	Sundaresan Jayanthi, <i>Indian Institute of Space Science and Technology (IIST), Kerala</i> Cross Polarization from Dipolar-Order under Magic Angle Spinning	Nilamoni Nath, <i>Gauhati University, Guwahati</i> De Novo NMR methodologies for the configurations of natural compounds
13:10 – 15:15hrs	Lunch and poster session(30-58)		
15:15 – 17:00hrs	Session-1	Session-2	Session-3
	SS Agarwal Auditorium	DK Chabra Auditorium	SR Naik Auditorium
	Bio-NMR	Metabolomics, clinical MRI & MRS	Solid State NMR & NMR methods
	Chairperson	Chairperson	Chairperson
	Student Oral Talks (1-7)	Student Oral Talks (8-14)	Student Oral Talks (15-21)
17:00 – 17:15hrs	Tea Break		
17:15 -18:55hrs	Session-1	Session-2	Session-3
	SS Agarwal Auditorium	DK Chabra Auditorium	SR Naik Auditorium
	Plenary Lecture 8(PL-8) Mandar V Deshmukh, CSIR-CCMB, Hyderabad Dynamics reshapes the dsRNA selection of dsRBDs (SS Agarwal Auditorium relayed online to DK Chabra Auditorium & SR Naik Auditorium) Chairperson- Jordan H. Chill		
17:55-18:25hrs	Chairperson - Jordan H. Chill	Chairperson – Rangeet Bhattacharya	Chairperson - Zhehong Gan
	Invited Lecture-29	Invited Lecture-30	Invited Lecture-31
	Janez Plavec, <i>University of Ljubljana, Slovenia,</i> Structural variability and dynamics of non- canonical DNA with regard to interaction with ligands	K.V. Ramanathan, <i>IISc Bangalore,</i> Study of Odd-Even effect in Molecular Mesogens with a Terminal Phenyl Ring Linked via a Spacer by ^{13}C Nuclear Magnetic Resonance Spectroscopy	Loren Andreas, <i>MPI for Multidisciplinary Sciences, Germany,</i> Unusual chemical shifts explained by isoleucine rotamer states in the M2 protein from Influenza A
	Invited Lecture-32	Invited Lecture-33	Invited Lecture-34

18:25-18:55hrs	Maya S Nair, <i>IIT Roorkee,</i> DNA-small molecule interactions and their structural analysis	Nitin P. Lobo, <i>CSIR-Central Leather Research Institute, Chennai</i> Understanding Mesogenic Molecular Order and Topology via ^{13}C – ^1H Dipolar Couplings: A Straightforward Approach	Srinivasan L. Poojari, <i>Jeol India Pvt. Ltd.</i> Introduction to latest Jeol NMR
18:55 onwards	Dinner (Banquet dinner at Holiday Inn sponsored by Jeol) Buses will go from conference venue to the hotel		

Day 4 Monday, February 05, 2024

09:00 – 11:00hrs	Session-1	Session-2	Session-3
	SS Agarwal Auditorium	DK Chabra Auditorium	SR Naik Auditorium
09:00 - 09:40hrs	Plenary Lecture 9(PL-9) Mrignayani Kotecha, eMRI – Current trends and Emerging Applications (SS Agarwal Auditorium relayed online to DK Chabra Auditorium & SR Naik Auditorium) Chairpersons - Nagana Gowda & Ashish Gupta		
	Chairpersons - G. A. Nagana Gowda & Ashish Gupta	Chairperson - Sheetal Kumar Jain	Chairperson - Desh Deepak
09:40 - 10:10hrs	Invited Lecture (IL- 35)	Invited Lecture (IL-36)	Invited Lecture (IL-37)
	Michael T. McMahon, <i>Johns Hopkins University, Maryland, USA</i> Currently available tools for using MRI to monitor gene expression	Arnab Dey, <i>Nantes Université, France</i> Hyperpolarized 13C and 1H NMR metabolomics at natural abundance	Pramodh Vallurupalli, TIFR Hyderabad, Exploring the Free Energy Surface of Proteins using CEST NMR Experiments: Detecting ‘invisible’ states with millisecond lifetimes missed by CPMG Experiments
10:10 - 10:40hrs	Invited Lecture (IL-38)	Invited Lecture (IL-39)	Invited Lecture (IL-40)
	Ahmad Raza Khan, <i>CBMR Lucknow,</i> Advance Diffusion MRI parameters as in- vivo MR microscope	Rituraj Mishra, <i>Nantes Université, France</i> Advances in Ultrafast Diffusion NMR : Techniques and Applications	Sai Chaitanya Chiliveri, <i>National Institutes of Health, USA</i> Structural Insights into Protein Oligomerization by Pressure-Jump NMR
	YFL-3	YFL-4	YFL-5
	Dushyant Kumar, <i>AIIMS, New Delhi</i> A longitudinal MR evaluation of yoga-induced changes in brain in post-stroke recovery	Aruna Singh, <i>Johns Hopkins University, Maryland, USA</i> Evaluating pH as a hypoxia marker in tumours using CEST MRI	Manisha Shukla, <i>University of Lucknow</i> Use of 2-D NMR for removal of spectral degeneracy and spectroscopic chromatography in oligosaccharides
11:00 - 11:30hrs	Tea Break		
11:30 - 13:10hrs	Session-1	Session-2	Session-3
	SS Agarwal Auditorium	DK Chabra Auditorium	SR Naik Auditorium
11:30 - 12:10hrs	Plenary Lecture 10(PL-10) Kavita Dorai, IISER Mohali Simulation of Open Quantum Dynamics and Characterization of Quantum States and Processes via Artificial Neural Networks and NMR (SS Agarwal Auditorium relayed online to DK Chabra Auditorium & SR Naik Auditorium) Chairperson - Anant Bahadur Patel, CCMB, Hyderabad		
	Chairperson - Anant Bahadur	Chairperson -	Chairperson - Kaustabh R Mote

	Invited Lecture (IL- 41)	Invited Lecture (IL-42)	Invited Lecture (IL-43)
12:10 - 12:40hrs	G. Jithender Reddy, <i>CSIR-IICT, Hyderabad</i> Mechanisms of molecular recognitions in transcriptional condensates	Chandan Singh , <i>Banaras Hindu University, Varanasi,</i> The choice of membrane systems to study membrane proteins in native environment	Vendor Talk
12:40 -13:10hrs 13:10 – 14:00hrs	Invited Lecture (IL-44)	Invited Lecture (IL-45)	Invited Lecture (IL-46)
	Sandeep Kumar Mishra, <i>IISER Pune</i> Extensive NMR Study on Proteoglycan Mimetics-Drug Conjugate promoted Lysosomal Pathway of Drug Delivery to Cancerous Cells	Vendor Talk	Vendor Talk
	Lunch		
	Session-1	Session-2	Session-3
	SS Agarwal Auditorium	DK Chabra Auditorium	SR Naik Auditorium
14:00-14:40hrs	Plenary Lecture 11 (PL-11) Samanwita Pal, IIT Jodhpur Multi-selective inversion recovery experiments for solution state structure and dynamics of small to intermediate sized molecules (SS Agarwal Auditorium relayed online to DK Chabra Auditorium & SR Naik Auditorium) Chairperson - N Suryaprakash		
14:40-15:10hrs	Chairperson - N Suryaprakash	Chairperson	Chairperson
	Invited Lecture-47	Invited Lecture-48	Invited Lecture-49
	Dr.Shashi Bala, <i>University of Lucknow,</i> 13C NMR Libraries of Pregnanes	Dr. Bikash Baishya, <i>CBMR Lucknow,</i> NMR based metabolomics in Tuberculous Meningitis and superficial Mycoses	
15:10–16:10hrs	NMRS General Body Meeting, Awards Distribution and concluding remarks		
16:10-16:30hrs	Tea Break		