

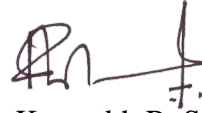
Report on National Conference on Electronic Structure (NCES-2022)

Title of the Event	National Conference on Electronic Structure (NCES-2022).
Date and Time	November 14-16, 2022
Mode of conduct	Offline
School/ Directorate/ Section	School of Physical and Applied Sciences
Collaborating Agency	--
Detail of the Resource Person	See the list of speakers on attached page.
Number of Faculty attended	8
Number of Student attended	10
No. of external participants	44
The objective	The main objective of this conference is to discuss the recent developments in the field of electronic structure spectroscopy and calculations.
Description of the activity	The electronic structure is one of the fundamental properties of matter, and as such has been significant developments in new methods, both theoretical and experimental, for investigating these properties. Electron spectroscopic techniques play a vital role in elucidating the origin of various exotic properties of materials, like Graphene, Topological Insulators, Superconductors and other correlated systems which are frontier areas of research in Condensed matter physics. Studies based on electron spectroscopy have been growing rapidly during the past decades, which prompted the development of big

	<p>facilities like synchrotron sources around the globe.</p> <p>Since 2016, a group of researchers from India using electron spectroscopic techniques organize a meeting every year to ideate, discuss and share experiences about their research work. These meetings are known as the “National Conference on Electronic Structure (NCES)” and are on an invitation basis only and all expenses of invited participants, except travel, are taken care of. The first of these meetings was held in Puri followed by Bhopal in 2017, Chennai in 2018 and Kolkata in 2019. This year, the meeting was organized at Goa University.</p> <p>Apart from exposing young members of the community and especially students to the latest research in the field, the conference provided a platform for extended discussions after each talk. The unique theme of the conference of having invited speakers, invited guests and students on one pedestal proved to be a real ice breaker.</p> <p>Recently, this group was influential in proposing a 4th generation synchrotron source under the Mega Science Vision 2035 in the area of “Accelerator Science, Technology and Applications.” This proposed facility was also discussed during the conference.</p>
<p>Benefit/Key outcome of the event</p>	<p>The main outcome of this event was a discussion on Indian efforts to build a High Brilliance Synchrotron Radiation Source to meet the requirements of Indian scientific community working in the area of electron spectroscopy.</p> <p>Goa University students were exposed to some of the latest research in this field. The poster session and ample time provided for discussion proved to be a great success in terms of exposing students and young faculty members to some of the best research happening in the country.</p>

Enclosure

Brochure – NCES-flyer.pdf
Attendance – NCES-attendance.pdf
Bio Data of resource person – not applicable
Photographs – Group photo2.jpg



Kaustubh R. S. Priolkar

Dean, SPAS and Local Convener

List of Speakers

1. D. D. Sarma, IISc, Bangalore
2. Ajay Shukla, CSIR NPL, New Delhi
3. Bahadur Singh, TIFR, Mumbai
4. Debraj Choudhuri , IIT Kharagpur
5. Dinesh Topwal , IOP, Bhubaneswar
6. Goutam Sheet, IISER Mohali
7. Indranil Sarkar, INST, Mohali
8. Joy Mitra, IISER Trivandrum
9. Manju Unnikrishanan , CSIR IMMT, Bhubaneswar
10. Mukul Laad , IIMSc Chennai
11. Pratap Raychaudhuri , TIFR Mumbai
12. Ranjit Thapa, SRM University, Amaravathi
13. Sanjoy Mahatha , UGC DAE CSR, Indore
14. Sugata Ray, IACS, Kolkata
15. Swarup Panda, Bennet University
16. V. Kanchana, IIT Hyderabad
17. Kalobaran Maiti , TIFR, Mumbai
18. Biju Raja Shekar, IOP Bhubanewar
19. Krishnakumar Menon, SINP Kolkata
20. Thirupattaih Setti , SNBNCBS, Kokata
21. Anjan Kumar Gupta, IIT Kanpur
22. Ashish Nandy , NISER Bhubaneswar
23. Dibyendu Bhattacharya, BARC, Mumbai
24. G. Vaitheeshwaran , Univ. of Hyderabad
25. Indra Dasagupta , IACS, Kolkata
26. Manas Kuma Dalai, CSIR IMMT, Bbsr
27. Mukul Gupta, UGC-DAE CSR, Indore
28. Pralay Santra , CeNS , Bangalore
29. Priya Mahadevan, SNBNCBS, Kolkata
30. R. S. Dhaka, IIT Delhi
31. Ravi Shankar Singh, IISER Bhopal
32. Soma Banik , RRCAT, Indore
33. Sudipta Kanungo, IIT Goa
34. Sujit Manna, IIT Delhi



National Conference on Electronic Structure (NCES) 2022

November 14 – 16, 2022

Goa University, Goa

About NCES

The electronic structure is one of the fundamental properties of matter, and as such has seen significant developments in new methods, both theoretical and experimental, for investigating these properties. Electron spectroscopic techniques have been playing a vital role in elucidating the origin of various exotic properties of materials, like Graphene, Topological Insulators, Superconductors and other correlated systems which are frontier areas of research in Condensed matter physics. Studies based on electron spectroscopy have been growing rapidly during the past decades, which prompted the development of big facilities like synchrotron sources around the globe.

Speakers and Invitees

D. D. Sarma, IISc, Bangalore
Ajay Shukla, CSIR-NPL, New Delhi
Arghya Taraphdar, IIT Kharagpur
Bahadur Singh, TIFR, Mumbai
Debraj Choudhuri, IIT Kharagpur
Dinesh Topwal, IOP, Bhubaneswar
Goutam Sheet, IISER Mohali
Indranil Sarkar, INST, Mohali
Joy Mitra, IISER Trivandrum
Manju Unnikrishanan, CSIR-IMMT, Bbsr
Mukul Laad, IMSc Chennai
Pratap Raychaudhuri, TIFR Mumbai
Preeti Bhoje, IIT Indore
Ranjit Thapa, SRM University, Amaravathi
Sanjoy Mahatha, UGC-DAE CSR, Indore
Srimanta Middey, IISc, Bangalore
Sugata Ray, IACS, Kolkata
Swarup Panda, Bennet University
V. Kanchana, IIT Hyderabad





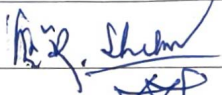




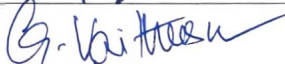
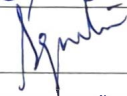





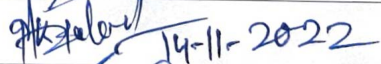

E. V. Sampathkumaran, TIFR Mumbai
Anjan Kumar Gupta, IIT Kanpur
Ashish Nandy, NISER Bhubaneswar
Bindu Radhamany, IIT Mandi
Dibyendu Bhattacharya, BARC, Mumbai
G. Vaitheeshwaran, Univ. of Hyderabad
Indra Dasagupta, IACS, Kolkata
Jayita Nayak, IIT Kanpur
Manas Kuma Dalai, CSIR-IMMT, Bbsr
Mukul Gupta, UGC-DAE CSR, Indore
Pralay Santra, CeNS, Bangalore
Priya Mahadevan, SNBNCBS, Kolkata
R. S. Dhaka, IIT Delhi
Ravi Shankar Singh, IISER Bhopal
Soma Banik, RRCAT, Indore
Sudipta Kanungo, IIT Goa
Sujit Manna, IIT Delhi
Tanusri Saha Dasgupta, SNBNCBS, Kolkata

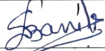
Conveners









Kalobaran Maiti, TIFR, Mumbai
Krishnakumar Menon, SINP Kolkata
Kaustubh Priolkar, Venkatesha Hathwar and Elaine Dias, Goa University
Biju Raja Shekar, IOP Bhubaneswar
Thirupattai Setti, SNBNCBS, Kolkata



Registration – NCES 2022

Sr. No.	Name of the Speaker/Invitee	Address	Signature
1	Prof. Ajay Shukla	NPL, New Delhi	
2	Prof. Anjan K. Gupta	IIT Kanpur	
3	Prof. Ashis Kumar Nandy	NISER, Bhubaneswar	
4	Prof. Bahadur Singh	TIFR, Mumbai	
5	Prof. Biju Raja Sekhar	IOP, Bhubaneswar	
6	Prof. D. D. Sarma	IISc, Bangalore	
7	Prof. Debraj Choudhuri	IIT Kharagpur	
8	Prof. Dibyendu Bhattacharya	BARC, Mumbai	
9	Prof. Dinesh Topwal	IOP, Bhubaneswar	
10	Prof. Ganapathy Vaitheeswaran	University of Hyderabad	
11	Prof. Goutam Sheet	IISER Mohali	
12	Prof. Indra Dasgupta	IACS, Kolkata	
13	Prof. Indranil Sarkar	INST, Mohali	
14	Prof. Joy Mitra	IISER Trivandrum	
15	Prof. Kalobaran Maiti	TIFR, Mumbai	
16	Prof. Krishnakumar S. R. Menon	SINP, Kolkata	
17	Prof. Manas Kumar Dalai	CSIR-IMMT, Bhubaneswar	
18	Prof. Manju Unnikrishnan	CSIR-IMMT, Bhubaneswar	

Sr. No.	Name of the Speaker/Invitee	Address	Signature
19	Prof. Mukul Gupta	UGC-DAE CSR, Indore	
20	Prof. Mukul Laad	IMSc, Chennai	
21	Prof. Pralay Santra	CeNS, Bangalore	
22	Prof. Pratap Raychaudhuri	TIFR, Mumbai	
x 23	Prof. Preeti Bhohe	IIT Indore	
24	Prof. Priya Mahadevan	SNBNCBS, Kolkata	
25	Prof. Rajendra S. Dhaka	IIT Delhi	
26	Prof. Ranjit Thapa	SRM University, Amaravathi	
27	Prof. Ravi Shankar Singh	IISER Bhopal	
28	Prof. Sanjoy Mahatha	UGC-DAE CSR, Indore	
29	Prof. Soma Banik	RRCAT, Indore	
x 30	Prof. Srimanta Middey	IISc, Bangalore	
31	Prof. Sudipta Kanungo	IIT Goa	
32	Prof. Sugata Ray	IACS Kolkata	
33	Prof. Sujit Manna	IIT Delhi	
34	Prof. Swarup Panda	Bennet University, Gr. Noida	
35	Prof. Thirupattai Setti	SNBNCBS, Kolkata	
36	Prof. V. Kanchana	IIT Hyderabad	

Sr. No.	Name of the Participant	Address	Signature
37	Dr. Ankita Singh	TIFR, Mumbai	
38	Dr. Rukma Nevgi	Goa University	
39	Mr Arunava Kar	SINP, Kolkata	
40	Mr Shailesh Kalal	UGC-DAE CSR, Indore	
41	Mr. Asif Ali	IISER, Bhopal	
42	Mr. Asif Iqbal	SRM University, AP	
43	Mr. Kuldeep Kargeti	Bennet University, Noida	
44	Mr. Nafea Manea Bhlos	Goa University	
45	Mr. Narad Barman	SRM University, AP	
46	Mr. Santoshkumar Bandaru	Goa University	
47	Ms Shivani Bhardwaj	IIT, Mandi	
48	Ms Suraina Gupta	IIT, Kanpur	
49	Ms Susmita Changdar	SNBNCBS, Kolkata	
50	Ms. Kritika Vijay	RRCAT, Indore	
51	Ms. Samiksha Malik	Goa University	
52	Ms. Sawani Datta	TIFR, Mumbai	
53	Ms. Shreyashi Sinha	IIT, Delhi	