



**Department of Physics**  
**The New College (Autonomous), Chennai - 600014**

<b>Title:</b>	<b>International conference on Recent Advancement in Material Science</b>
<b>Date:</b>	<b>21.01.2020</b>
<b>Expert(s):</b>	<b>Dr. J. MADHAVAN,</b> <b>Dean of Research and Associate Professor,</b> <b>Loyola College, Chennai, India.</b>  <b>Dr. SIDDHARTH SURAJBHAN GAUTAM</b> <b>Research Associate</b> <b>Ohio State University, USA</b>  <b>Dr. BHUVANESH RAMAKRISHNA</b> <b>Assistant Professor, IIT Hyderabad, India</b>  <b>Dr. ABDUL AJEES ABDUL SALAM</b> <b>Associate Professor, MAHE, Karnataka, India</b>  <b>Dr. R. SUGADEV</b> <b>Scientist-E, DRDO, New Delhi, India</b>
<b>Convenor</b>	<b>Capt. M. Anees Ahmed</b> <b>Head and Associate Professor,</b> <b>Department of Physics,</b> <b>The New College, Chennai – 600014</b>
<b>Organising Secretary:</b>	<b>Dr. M. Gulam Mohamed</b> <b>Dean Research and Associate Professor of</b> <b>Physics, The New College, Chennai –</b> <b>600014</b>
<b>Assistant Organising Secretary:</b>	<b>Dr. M. Nizam Mohideen &amp;</b> <b>Dr. A. Syed Mohammed Mujaheer</b> <b>Assistant Professors of Physics,</b> <b>The New College, Chennai – 600014</b>



# INVITATION

STEERING COMMITTEE CMFEP-2020/2021		International Conference on Recent Advancements in Material Science New-Play-2020 January 11, 2020		International Conference on Recent Advancements in Material Science New-Play-2020 January 11, 2020	
<b>Chairman</b> <b>Dr. Nizam</b> <b>NAWAR MOHAMMED ABDUL AZIZ NAWAR</b> <b>Hon. Secretary and Correspondent</b> <b>Jawahar, TRAPPEE, ARNOLD SARIH</b> <b>Hon. Treasurer</b> <b>Jawahar, ELIAN SATT SARIH</b>				<b>Registration form</b> <b>Name (in BLOCK LETTERS)</b> ..... <b>Designation/Department</b> ..... <b>Address</b> ..... <b>Mobile No.</b> ..... <b>E-Mail</b> ..... <b>Category</b> Student Research School Faculty/Industrial ..... <b>Whether Presenting Paper in the Conference (Yes/No)</b> <b>If YES then title of the Article</b> ..... <b>ID No.</b> ..... <b>Amount</b> ..... <b>Date</b> ..... <b>Name of the Bank &amp; Branch</b> ..... <b>(Draft in favour of "The Principal, The New College, Chennai-37" payable at Chennai)</b> <b>Date</b> ..... <b>Place</b> ..... <b>Signature</b> ..... <b>(This format can also be used through mail)</b>	
<b>PRINCIPAL</b> <b>Dr. A. ABDUL JABBAR</b> <b>Principal, The New College, Chennai</b>		<b>Organized by</b> 			
<b>CONVENOR</b> <b>Capt. M. ANAND ARNOLD</b> <b>Head, P.C. &amp; Research Dept. of Physics</b>		<b>PG &amp; Research Department of Physics</b> <b>The New College (Autonomous)</b> <b>Recognized by NAAC with "A" Grade</b> <b>(Affiliated to University of Madras)</b> <b>Peeters Road, Royapettah,</b> <b>Chennai-600 014.</b> <b>INDIA</b>			
<b>ORGANIZING SECRETARY</b> <b>Dr. M. GULAM MOHAMMED</b> <b>Associate Professor, P.C. &amp; Research Dept. of Physics</b>					
<b>EXEC. ORGANIZING SECRETARIES</b> <b>Dr. M. NIZAM MOHAMMED</b> <b>Dr. A. SYED MOHAMMED MUHAMMED</b>					
<b>ORGANIZING COMMITTEE MEMBERS</b> <b>Dr. P. A. ABDULLAH MAMMOUD</b> <b>Dr. A. MOHAMMED MOHAMMED</b> <b>Dr. R. ARNOLD</b> <b>Dr. SYED ABUL HASAN</b> <b>Dr. B. ANAND</b> <b>Dr. N. ARNOLD SARIH</b> <b>Dr. M. MOHAMMED SARIH</b> <b>Dr. M. MOHAMMED SARIH</b> <b>Dr. MOHAMMED MUSTAFA KUTUBULLAH</b> <b>Dr. C. MOHAMMED</b> <b>Dr. S. C. MOHAMMED MOHAMMED</b> <b>Dr. L. PRINCE JOSEPH</b> <b>Dr. L. ALLI VINODHAR</b> <b>Dr. L. MOHAMMED ZAKIR</b>					

**About the college**

The New College was founded in 2<sup>nd</sup> July 1931 by the Madras Educational Association of Southern India (MEA-SI). The Institution is one of the affiliated colleges to the University of Madras, with Autonomous status. The college promotes higher education offering instruction in more than twenty courses in humanities, science and commerce in undergraduate level and more than twelve courses in postgraduate level. It has not only opened its doors to academics but also to research in all postgraduate departments. Though primarily established for providing higher education to Madras students, it has also opened its doors to students from all communities.

**About the department**

The department of Physics in The New College was established in 1931 which was started by offering intermediate program. From the humble beginning it has grown in leaps and has stood tall today by offering B.Sc., M.Sc. and Ph.D. program. The department has established a bench mark in research by publishing more than 100 publications in national and international journals.

**About the conference**

International Conference on Recent Advancements in Material Science is being organized by PG & Research Department of Physics, The New College, Chennai on 21<sup>st</sup> January 2020. We hope that this will open a new era in disseminating the recent trends in material science which will pave a way for researchers in innovating and designing new materials which helps in the betterment of the fellow humans.

**Featured areas**

- + Crystal Growth Design and Characterization
- + Nonlinear Optics
- + Crystallography
- + Nanostructured Materials
- + Theoretical And Computational Methods
- + Advanced Spectroscopy Tools
- + Ultrasonics
- + Magnetic and Optoelectronic Materials
- + Nanosensor and Smart Materials
- + Nonlinear Dynamics

**Call for Abstracts**

The abstract of research paper should be submitted to [abstracts@newcollege.edu.in](mailto:abstracts@newcollege.edu.in) through e-mail attachment in MSWord format (Times New Roman font spacing 1.5) Title 14 points, Author Name & Affiliation 10 points (Other Instructions Content, Keywords & Email ID 6/2 points). The abstract should not exceed 300 words. The selected abstracts will be allowed for oral & poster presentations. The size of the poster should be 90 x 120 cm. All the abstracts will be published in the seminar proceedings with ISBN number.

**Important Dates**

Abstract Submission	18 January 2020
Acceptance Notification	12 January 2020
Registration Deadline	13 January 2020
Registration Fees	
UJPG Students	Rs.1000/-
Research Students	Rs.2000/-
Faculty/Industrialists	Rs.3000/-

Open Registration can be Done

**Abstracts**

Abstracts will be given for the best Oral and Poster Presentations

**INVITED SPEAKERS**

Dr. J. MADHAVAN  
Associate Professor, Loyola College, Chennai

Dr. NIDHARITH SUREJBHAN GUTAM,  
Research Assistant, Oita State University, U.K.A.

Dr. BHUVANESHI RAMAKRISHNA  
Assistant Professor, IIT Hyderabad, India.

Dr. A ABDEL-AZEZ ABDEL SALAM  
Associate professor, Mansel University, Comoros, India

Dr. R. SUGADEV,  
Researcher, IISCT, Delhi, India

**ADVISORY COMMITTEE**

Dr. V. N. S. Murthy, Secretary of CMET, Hyd.

Dr. P. Sagarap, Assoc. Prof., Loyola College, Ch.

Dr. Ritu John, Prof. UNOBA, Ch.

Dr. C. Venkateswara, Prof. UNOBA, Ch.

Dr. G. Anbalagan, Prof. UNOBA, Ch.

Dr. R. Rajend, Prof. AI, Ch.

Dr. K. Sangeetha, Prof. UNOBA, Ch.

Dr. P. Marudhachandran, Principal, CCN college, Ch.

Dr. V. Vigneshwaran, NPSC, AIIMS, New Delhi

Dr. A. Ashok Reddy, Research Asst., UJPG, UNO

Dr. Harinarayan Sridharan, Associate Professor, New College, Chennai

Dr. K. Venkateswara, Assoc. Prof., MET, Chennai

Dr. R. Venkateswara, Secretary, P. UNOBA, Mang.

Dr. R. Mathan Kumar, Assoc. Prof., Loyola College, Ch.

Dr. R. Raj Mohan Kumar, Prof. IIMT, Tiruch.

Dr. V. Venu, Head, MGT, Madurai

Dr. C. Gayathri, Asst. Prof., AMET Tiruch. Ch.

Dr. S. Anandha Devi, Assoc. Prof., Loyola College, Ch.

Dr. Victor Antony Raj, Asst. Prof., Loyola College, Ch.

Dr. Thanikachari, Asst. Prof., KJC College, Ch.

Dr. Asan. AB Suresh, J. KJCAH, Kulpai tam.

For any query c/o Ms. Zaidat 9449086479 9892399999  
(Prof. Dr. Anandachandran, P.O. Box for participating)





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The New College (Autonomous), Chennai - 600014

AGENDA



**P.G. & Research Department of Physics**  
**The New College (Autonomous)**

Affiliated to University of Madras, Re-Accredited by NAAC with 'A' Grade  
PETERS ROAD, ROYAPETTAH, CHENNAI – 600 014, INDIA

**INTERNATIONAL CONFERENCE ON  
RECENT ADVANCEMENTS IN MATERIAL SCIENCE**

**(NewPhy 2020)**

**21 January 2020, Tuesday**

**AGENDA**

08.30 onwards	Registration	
09.00 – 09.45	Inauguration	<b>Dr. J. MADHAVAN</b> Dean of Research and Associate Professor Loyola College, Chennai, India.
09.45 – 10.45	SESSION I	<b>Dr. SIDDHARTH SURAJBHAN GAUTAM</b> Research Associate Ohio State University, U.S.A.
10.45 – 11.00	Tea Break	
11.00 – 12.00	SESSION II	<b>Dr. BHUVANESH RAMAKRISHNA</b> Assistant Professor IIT Hyderabad, India.
12.00 – 01.00	SESSION III	<b>Dr. ABDUL AJEES ABDUL SALAM</b> Associate professor MAHE, Karnataka, India.
01.00 – 02.00	Lunch	
02.00 – 03.00	SESSION IV	Oral /Poster Presentations
03.00 – 04.00	SESSION V	<b>Dr. R. SUGADEV</b> Scientist-E, DRDO, New Delhi, India.

**Followed by Valediction**

**\*Each Session is for 1 hour (45 minutes of Lecture and 15 minutes of Interaction)**





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COVER PAGE OF ABSTRACT BOOK

# INTERNATIONAL CONFERENCE ON RECENT ADVANCEMENTS IN MATERIAL SCIENCE

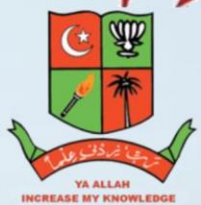
(NewPhy 2020)

21<sup>st</sup> January 2020

*Souvenir*

*&*

*Abstracts*



**P.G. & Research Department of Physics**  
**The New College (Autonomous)**

*Affiliated to University of Madras, Re-Accredited by NAAC with 'A' Grade*

**TAMIL NADU, CHENNAI - 600 014, INDIA**







**Department of Physics**  
**The New College (Autonomous), Chennai - 600014**

**ORGANISING TEAM**

**P.G. & Research Department of Physics**

**The New College (Autonomous)**

*Our Strength*





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### PHOTOS







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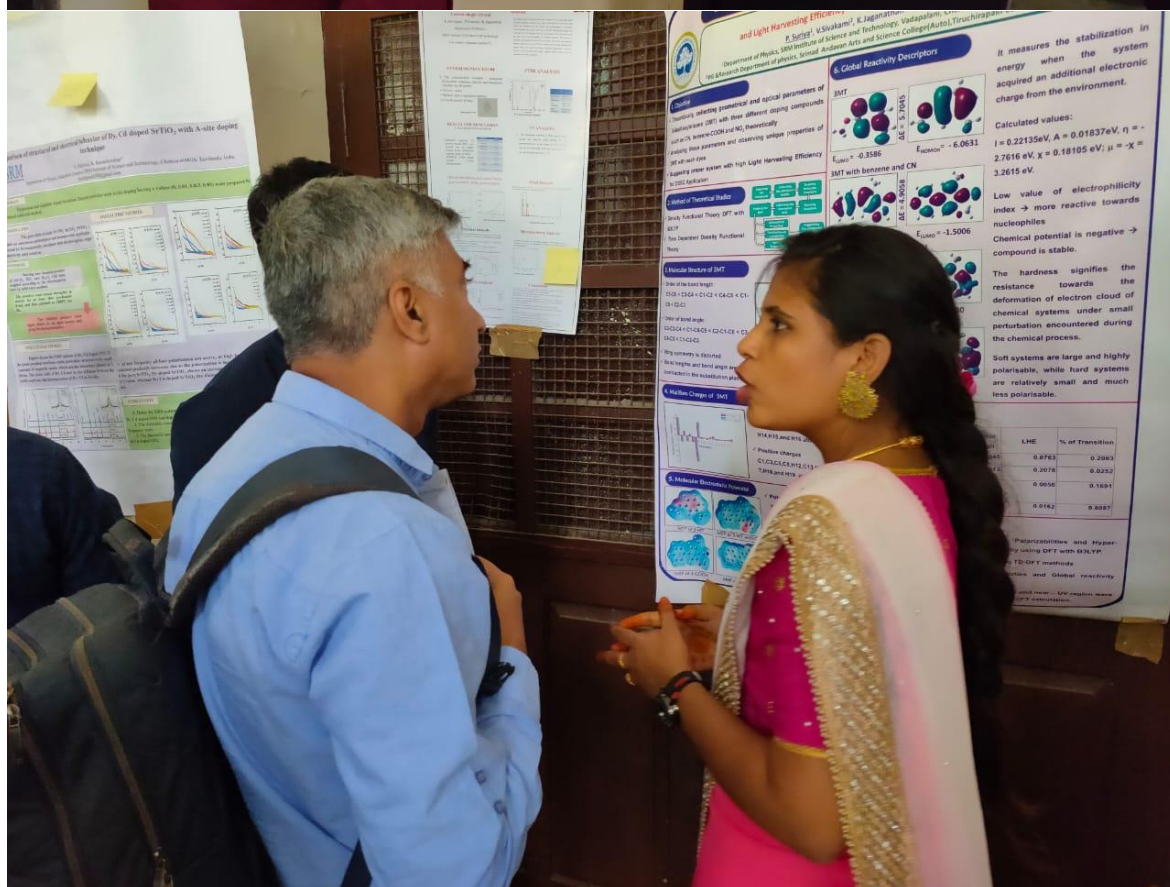
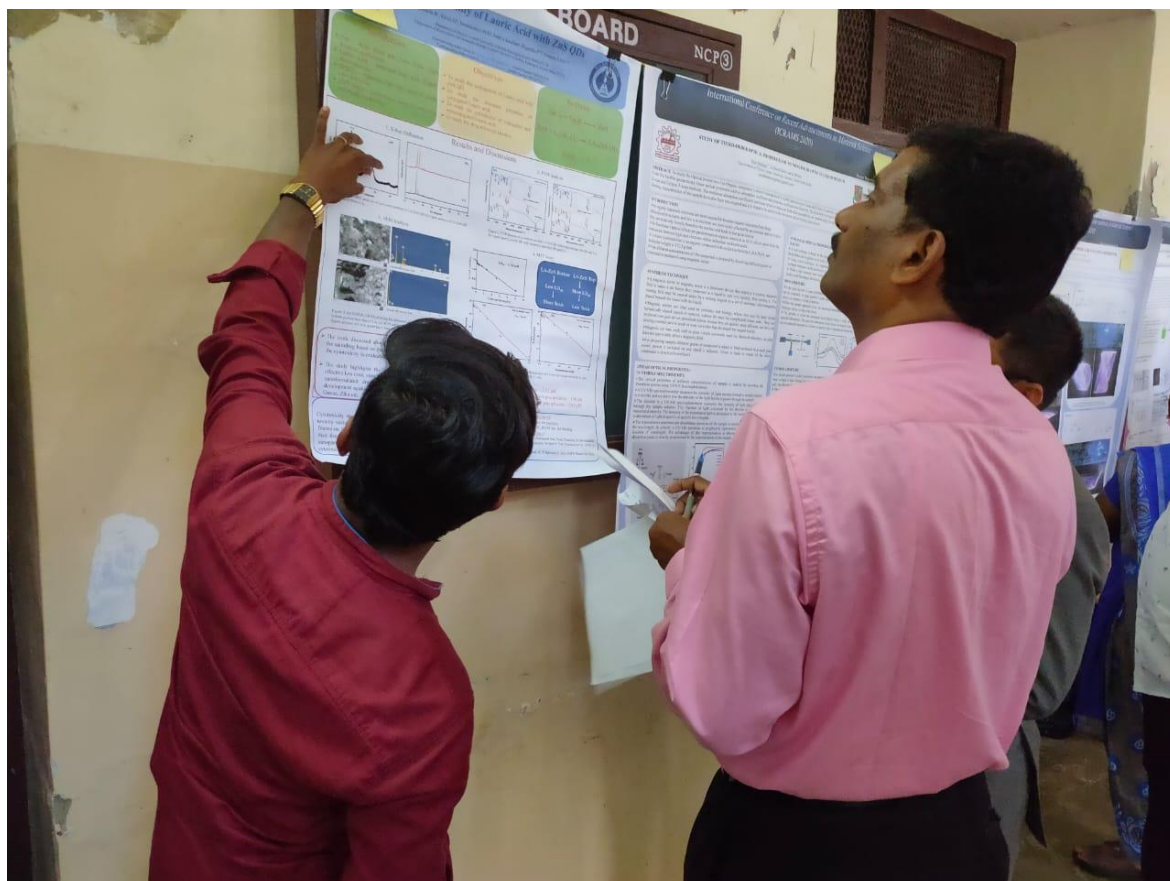






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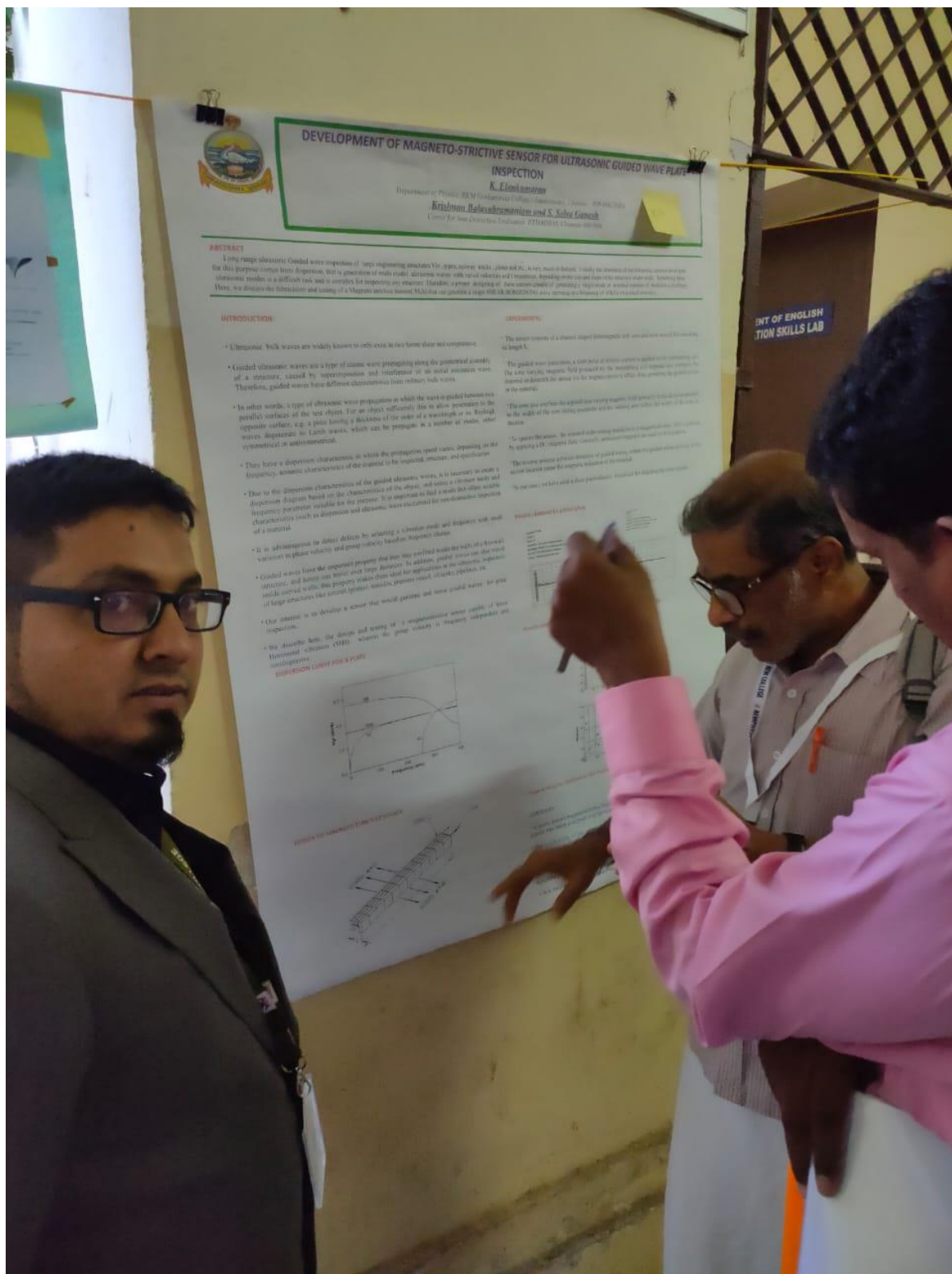






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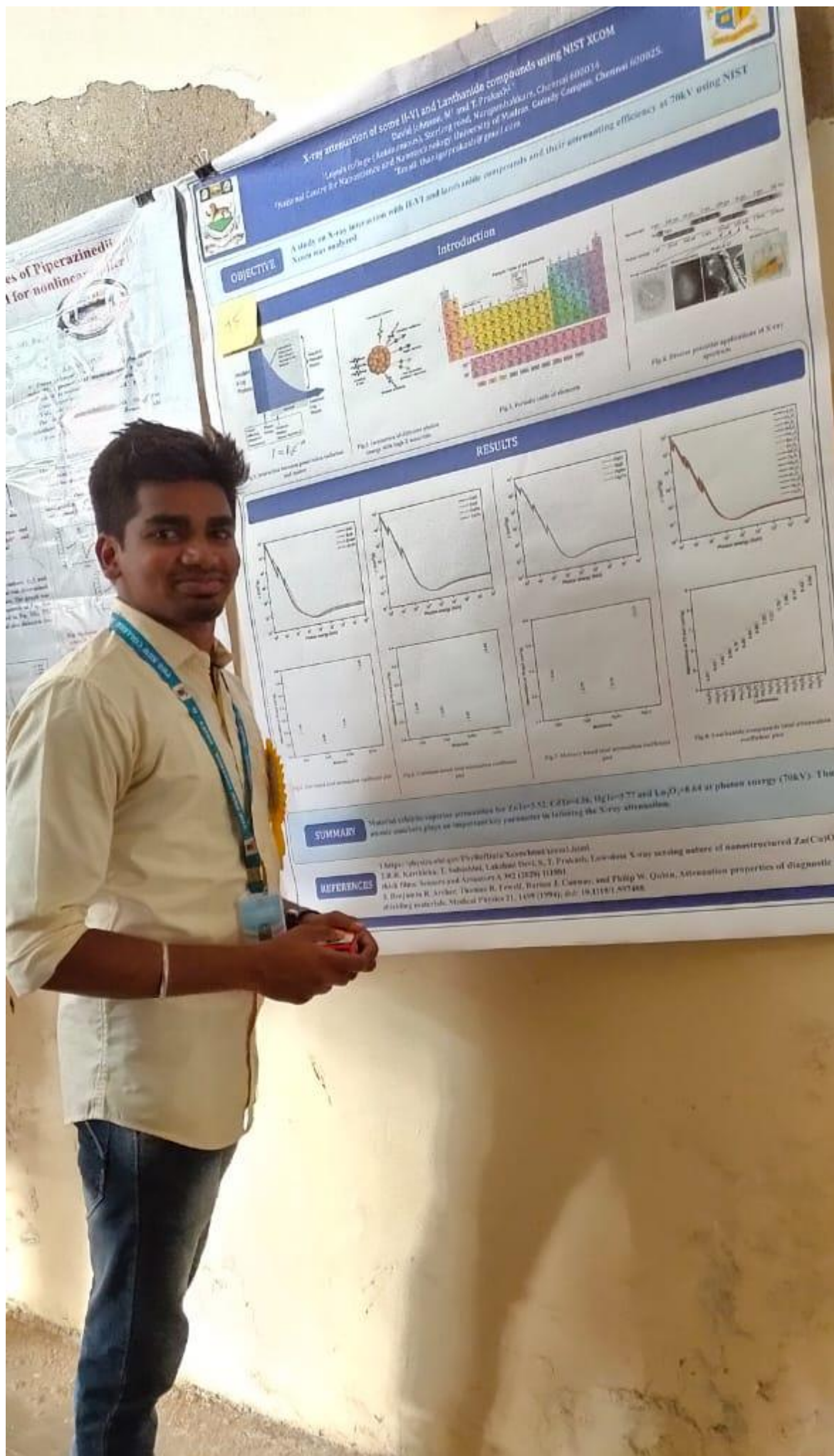
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### REPORT OF THE CONFERENCE

Name of the Conference	<b>International Conference on Recent Advancements in Material Science (NewPhy 2020)</b>	
Date and Time	21 <sup>st</sup> January 2020 (Tuesday) 8:30 a.m. – 5:30 p.m.	
Venue	MIIT Auditorium, The New College	
The inaugural and valedictory secessions were chaired by The Principal, Dr. A. Abdul Jabbar. The sessions were attended by the Vice-Principals academic and Administration, Controller of Examinations, IQAC Coordinator, Heads and Staff Members of other Departments of our College. The Conference Souvenir was released by the Principal. The Conference deliberations were carried forward by the following delegates.		
Guest Speakers	Session	Topic
<b>Dr. J. MADHAVAN</b> Dean of Research and Associate Professor Loyola College, Chennai.	Inauguration	Inaugural Talk on Ethics to be followed in Scientific Publications
<b>Dr. SIDDHARTH SURAJBHAN GAUTAM</b> Research Associate, Ohio State University, U.S.A.	Session I	Propane Confined in Silica Nanopores: Neutron Scattering and MD Simulation Studies
<b>Dr. BHUVANESH RAMAKRISHNA</b> Assistant Professor, IIT Hyderabad, India.	Session II	Reaching light-speed in a Centimeter
<b>Dr. ABDUL AJEES ABDUL SALAM</b> Associate professor, MAHE, Karnataka, India.	Session III	Crystallization of Drug Molecules using Bio-Inspired Materials by Laser-Induced Crystallization Technique
<b>Dr. R. SUGADEV</b> Scientist-E, DRDO, New Delhi, India.	Session IV	Design and Application of Biological Materials
No. of Participants	136	
No. of Abstracts Received	109 (3 from Taiwan and Russia)	
Papers Presented (Oral)	15	
Papers Presented (Poster)	94	



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### LIST OF PARTICIPANTS

#### ORAL PRESENTATIONS

NAME/ INSTITUTION/ MOBILE NO/ E MAIL ID	ABSTRACT TITLE	ORAL PRESENTATION ID
<b>P.Maheswari</b> Department of Nautical Science, VELS University (VISTAS), Thalambur - 603 103, India, <a href="mailto:maheshiit39@gmail.com">maheshiit39@gmail.com</a>	Antibacterial activity of Bio - modified TiO <sub>2</sub> Nanoparticles against Gram positive and Gram negative bacteria	<b>01</b>
<b>S.Selvakumar</b> Research Scholar-Physics Department of Renewable Energy Science, Manonmaniam Sundaranar University, Tirunelveli-627 012 <a href="mailto:kumartvl88@gmail.com">kumartvl88@gmail.com</a>	Nano Structured Absorber: Preparation, Characterisation And Its Contribution To Thermal Performance Of Solar Collector	<b>02</b>
<b>D. Angeline Shirmila</b> PG and Research Department of Physics, Queen Mary's College(A), Chennai-4, <a href="mailto:guqmc@yahoo.com">guqmc@yahoo.com</a> <a href="mailto:angelineshirmila2006@gmail.com">angelineshirmila2006@gmail.com</a>	Synthesis, Growth, Structure determination and Hirshfeld surface analysis of a new chalcone derivative: (2E)-2-[(3,4- dimethoxyphenyl)methylidene]- 3,4-dihydronaphthalen-1(2H)-one	<b>03</b>
<b>N. Sivakumar</b> Crystal Growth Centre, Anna University, Chennai 600 025. <a href="mailto:nsivakumar1986@gmail.com">nsivakumar1986@gmail.com</a>	Synthesis, structure, crystalline perfection and mechanical hardness of pure and strontium substituted LaFeO <sub>3</sub> single crystals	<b>04</b>
<b>Gunasekaran Munusamy</b> Pg& Department of Physics, Muthurangam Government Arts College (Aut), Vellore-2, Tamil Nadu, India. <a href="mailto:mgsphy@gmail.com">mgsphy@gmail.com</a>	Structural And Optical Properties Of Silar Deposited Cds, Ni, Ti And Zn Doped Cds Thin Film	<b>05</b>
<b>G. Dhanalakshmi</b> Department of Physics, Presidency College(Autonomous), University of Madras, Chennai. <a href="mailto:aravindhannpresidency@gmail.com">aravindhannpresidency@gmail.com</a> <a href="mailto:gdhansi82@gmail.com">gdhansi82@gmail.com</a>	Crystal structure, Hirshfeld surface, Energy framework Analysis of a novel carbazole derivative	<b>06</b>
<b>L. Sangeetha</b> Department of Physics, Saveetha Engineering College, Thandalam, Ch. <a href="mailto:sangeethal@saveetha.ac.in">sangeethal@saveetha.ac.in</a> +919962045249	Photostimulated and thermostimulated luminescence mechanisms in BaFBr:Eu <sup>2+</sup> x-ray storage phosphor	<b>07</b>
<b>K. Pugazhendhi</b> Department of Physics, Energy Nanotechnology Centre (ENTeC), Loyola Institute of Frontier Energy (LIFE), Loyola College, Chennai <a href="mailto:jmshyla@loyolacollege.edu">jmshyla@loyolacollege.edu</a> <a href="mailto:pugazhl1702@gmail.com">pugazhl1702@gmail.com</a>	Plasmon-induced Photoluminescence in TiO <sub>2</sub> /Al@ZnO Nanocomposite for Energy Applications	<b>08</b>





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### The New College (Autonomous), Chennai - 600014

<b>S. Syed Abuthahir</b> PG & Research Department of Physics, The New College (Autonomous), University of Madras, Chennai 600 014, <a href="mailto:abu_physics@yahoo.com">abu_physics@yahoo.com</a>	The crystal structures and Hirshfeld surface analyses of four 3, 5-diacetyl-2-methyl-2, 3- dihydro-1, 3, 4-thiadiazol-2-yl derivatives	<b>09</b>
<b>Shackeerali. M</b> Department of Physics, The New College (Autonomous), Chennai, India 600 014. <a href="mailto:shackeerali@gmail.com">shackeerali@gmail.com</a>	A Theoretical Study on Modulation Instability in a Metamaterial	<b>10</b>
<b>N. Ajmal Khan</b> Department of Physics, The New College (Autonomous), Chennai, Tamil Nadu – 600014 <a href="mailto:akajmalak@gmail.com">akajmalak@gmail.com</a> <a href="mailto:mmdnaseer@gmail.com">mmdnaseer@gmail.com</a>	Molecular Modeling Studies on Graphene Quantum Dot Models: A DFT Approach	<b>11</b>
<b>S. Sharon Tamil Selvi</b> Department of Physics, Loyola College, Chennai 600034, India <a href="mailto:allwinjoseph90@gmail.com">allwinjoseph90@gmail.com</a>	Synthesis and Characterization of ZnO/CdS Nanocomposite and its Photocatalytic Degradation of Mordant Black 11	<b>12</b>



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### POSTER PRESENTATIONS

NAME/ INSTITUTION/ MOBILE NO/ E MAIL ID	ABSTRACT TITLE	POSTER ID
<b>Nagaraj R,</b> Research Scholar, <b>C/o Dr. S. Ranjith,</b> Department of Physics, Ramapuram Campus SRM-IST, Chennai, Tamil Nadu- 600 089 <a href="mailto:ranjith7784@yahoo.co.in">ranjith7784@yahoo.co.in</a>	Structural, Optical, Thermal and Mechanical Properties of Organic Single Crystal for NLO Applications	<b>01</b>
<b>Thanuja Balasundaram</b> Dept. of chemistry, Sri Sairam Engineering College Chennai 600 044, Tamil Nadu, <a href="mailto:India.thanuja.che@sairam.edu.in">India.thanuja.che@sairam.edu.in</a>	Molecular interactions in binary mixtures of derivatives of Semicarbazone benzoin with various solvents through ultrasonic speed measurements	<b>02</b>
<b>K.K. Sivakumar</b> Associate Professor and Head, Department of Chemistry, AMET Deemed to be University, Kanathur, Chennai. <a href="mailto:sivakumarccet@gmail.com">sivakumarccet@gmail.com</a>	ZnO nanoparticles in Water and Wastewater Treatment	<b>03</b>
<b>R. Gnanadeepam</b> Department of physics, SRM Institute of Science and technology, Ramapuram Campus, Chennai-600089, India <a href="mailto:gnanadeepamapj@gmail.com">gnanadeepamapj@gmail.com</a>	Thermal and Mechanical Properties of Acetone-2, 4-Dinitrophenylhydrazone Single Crystal	<b>04</b>
<b>Dr. V. Usha</b> Asst. Professor, Department of Chemistry, University College of Engineering, Panruti 607106. Mobile: 9710891475, <a href="mailto:vushachem2004@gmail.com">vushachem2004@gmail.com</a>	Activated Sodium Bentonite Catalyst for the Synthesis of Enone	<b>05</b>
<b>Dr. G. RAMANATHAN</b> Assistant Professor Sri Sai Ram Engineering College West Tambaram Chennai. <a href="mailto:gramsriram@gmail.com">gramsriram@gmail.com</a>	Surface Area, Average pore size CeO <sub>2</sub> Nano Particles	<b>06</b>
<b>Dr. S. Rafi Ahamed</b> Associate Professor, Department of Physics, Academy of Maritime Education and Training, 135- East Cost Road, Kanathur- 603112 Mobile: 9698753162. <a href="mailto:rafiyahamed81@amet.ac.in">rafiyahamed81@amet.ac.in</a>	Physico chemical properties on novel conjugated heterocyclic compounds dicyandiamide and 4- (difluoromethoxy)-2- hydroxybenzaldehyde 2- cyanoguanidine as sensor for heavy metals	<b>07</b>
<b>T. Subashini</b> National Centre for Nanoscience and Nanotechnology, University of Madras, Guindy Campus, Chennai 600025, India <a href="mailto:thanigaiprakash@gmail.com">thanigaiprakash@gmail.com</a> <a href="mailto:subaece13@gmail.com">subaece13@gmail.com</a>	BiVO <sub>4</sub> a promising material for supercapacitor and X-ray detection	<b>08</b>
<b>V. Rajadurai</b>	Dark Soliton In Spinor Bose Einstein Condensation	<b>09</b>





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## The New College (Autonomous), Chennai - 600014

Department of Physics, Velammal Engineering College, Chennai-600066, India <b>rajaduraiv1993@gmail.com</b>		
<b>J. Stella Punitha</b> Department of Physics, SRM Institute of Science & Technology, Ramapuram, Chennai – 600089 <b>Sakuraj86@yahoo.co.in</b> <a href="mailto:stellajoseph1101@gmail.com">stellajoseph1101@gmail.com</a>	Characterization of the Structural, Optical and Magnetic properties of double perovskite $\text{Pr}_2\text{FeMnO}_6$	<b>10</b>
<b>K. Ramachandran</b> Department of Physics, Vadapalani Campus, SRM Institute of Science and Technology, Chennai-600026, Tamilnadu, India. <a href="mailto:kaviramach76@gmail.com">kaviramach76@gmail.com</a>	Mechanical activation of synthesis reaction for Cu doped $\text{BaTiO}_3$ with $x = (0, 0.01, 0.03)$ nano-ceramics	<b>11</b>
<b>E. Padmini, K. Ramachandran*</b> Department of Physics, Vadapalani Campus, SRM Institute of Science and Technology, Chennai-600026 <a href="mailto:kaviramach76@gmail.com">kaviramach76@gmail.com</a>	Comparison of structural and electrical behavior of Dy, Cd doped $\text{SrTiO}_3$ with A-site doping technique	<b>12</b>
<b>S Shasimithra</b> Department of Physics, Anna univ <a href="mailto:vallavanbalakrishna@gmail.com">vallavanbalakrishna@gmail.com</a>	Nanosensors And Smart Material	<b>13</b>
<b>M. Abila Jeba Queen</b> Department of Physics, Holy Cross College(Autonomous), Nagercoil TN <a href="mailto:jeba.abi@gmail.com">jeba.abi@gmail.com</a>	Effect of nickel on structural and optical properties of organometallic crystal	<b>14</b>
<b>P. AjiUdhaya</b> Department of Physics, Holy Cross College, Nagercoil, Affiliated to Manonmaniam Sundaranar University, Abishekapatti, Tirunelveli-627012, India. <a href="mailto:ajiudhaya@gmail.com">ajiudhaya@gmail.com</a>	Egg white assisted green synthesis of Zinc Ferrite nanoparticles and their structural and magnetic properties	<b>15</b>
<b>Dr.R.Divya</b> Assistant Professor, Department of Physics, S.T. Hindu College, Nagercoil <a href="mailto:ajiudhaya@holycrossnsl.edu.in">ajiudhaya@holycrossnsl.edu.in</a>	Green Synthesis and Characterization of $\text{ZnO}$ Nanoparticles Using Allium Cepa	<b>16</b>
<b>U. Rajesh Kannan</b> Assistant Professor, Department of Physics, Kamaraj College, Tuticorin, 628003, Tamilnadu, India <a href="mailto:rajeshphymasu@gmail.com">rajeshphymasu@gmail.com</a>	Xrd, Optical And Thermal Properties Of Tetrakis-Thiourea Nickel Sulphate Crystals ( $\text{Tns}$ ) By Slow Evaporation Method	<b>17</b>
<b>T. Regin Das</b> Department of Physics, Lekshmipuram Arts and Science College, Neyyoor, Nagercoil <a href="mailto:reginphysics@gmail.com">reginphysics@gmail.com</a>	Effect of annealing temperature on structural properties of the Tin Oxide ( $\text{SnO}_2$ ) Nanoparticles	<b>18</b>
<b>Arun Varghese</b> Department of Physics, Anna University, Chennai, Tamil Nadu, <a href="mailto:arunthomasvarghese@gmail.com">arunthomasvarghese@gmail.com</a>	Study Of Third-Order Optical Properties Of An Nonlinear Optical Liquid Medium	<b>19</b>
<b>R. Dilber Pushpitha</b> Department of Physics, SRC, SASTRA Deemed to be University, Kumbakonam, India.	Effect of magnetic field on Spin-dependent resonant tunneling of light holes in $\text{CdTe}/\text{Cd}_{1-x}\text{Mn}_x\text{Te}$ double barrier heterostructure	<b>20</b>



# Department of Physics

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<b>A.S Jayasree1,</b> Department of physics, college of engineering, Anna University , <a href="mailto:Guindyjayasreeshivakumar30@gmail.com">Guindyjayasreeshivakumar30@gmail.com</a>	Synthesis and Characterization of organic nonlinear optical material: Nitrophenol	<b>107</b>
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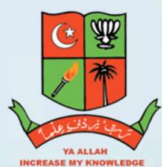


# Department of Physics

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<b>P. Saravanan</b> PG & Research Department of Physics, Arignar Anna Govt. Arts College, Cheyyar – 604 407, India.	Green synthesis, spectral, electrical property analysis of ZnO Nanoparticles	<b>109</b>
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### CERTIFICATE



### P.G. & Research Department of Physics The New College (Autonomous)

*Affiliated to University of Madras, Re-Accredited by NAAC with 'A' Grade*

**CHENNAI - 600 014, TAMIL NADU, INDIA**

**Certified that \_\_\_\_\_**

**attended a two days webinar on “Research Methodology” on  
02 & 03 September 2020 organised by the Dean of Research,  
The New College (Autonomous), Chennai – 600 014.**

**Dean of Research  
The New College**

**Principal  
The New College**

