

CURRICULUM VITAE

Name:	Santosh Kumar Tripathi	
Designation:	Professor	074
School:	Physical Sciences	
Department:	Physics	
Specialisation & Research Interests:	Energy Storage Devices, Water Treatment, Waste I	Vanagement
Email IDs (Official & Personal)	sktripathi@mgcub.ac.in	
Mobile No.:	+91-8602800521	
Address:	Balua Taal, Motihari, East Champaran, Bihar-84540)1

2. ACADEMIC QUALIFICATION (in reverse Chronological order):

Degree	Year	University / Board
PhD (Physics)	2006	Tezpur Central University
M.Sc-Physics	1999	V.B.S. Purvanchal University
B.Sc (Physics, Chem, Maths)	1997	V.B.S. Purvanchal University
XII th (A.I.S.S.C.E)	1994	C.B.S.E Board
X th (A.I.S.S.E)	1992	C.B.S.E Board

3. ANY OTHER QUALIFICATION:

N.A

4. **PROFESSIONAL EXPERIENCE:**

Organisation/Institute/University	Position Held	Duration
Mahatma Gandhi Central University, Bihar	Professor	27 th October 2019 Onwards
Mahatma Gandhi Central University, Bihar	Associate Professor	27.10.2016 to 26.10.2019
Jaypee University of Engineering and Technology, Madhya Pradesh	Assistant Professor	03.07.2006 to 22.10.2016

5. ADMINISTRATIVE ASSIGNMENTS:

Position Held	Duration	Nature of Work
Dean, School of Physical Sciences	21.11.2016 to 28.08.2019	Academic and Administrative Responsibilities of entire School
Head, Department of Physics	21.11.2016 to 10.10.2019	Academic and Administrative Responsibilities of Department
Controller of Examination (I/C)	16.02.2017 to 14.09.2019	Conduction of Examination and Evaluation system of the University

6. COURSES TAUGHT:

- Solid State Physics
- Nano Materials and Applications
- Wave and Optics
- Engineering Physics-I
- Renewable Energy and Energy Harvesting
- Basic Instrumentation Skills

7. RESEARCH SUPERVISION:

A. Ph.D.:

i.	Awarded	:	02
ii.	Submitted	:	Nil
iii.	Ongoing	:	Nil

B. M.Phil./M.Tech:

i.	Awarded	:	01
i.	Awarded	:	01

- ii. Submitted : Nil
- iii. Ongoing : Nil

C. Non-Degree Oriented (Master's Level Dissertation):

i.	Awarded	:	Nil
ii.	Submitted	:	Nil

iii. Ongoing : Nil

8. CONTRIBUTION TO CORPORATE LIFE OF THE UNIVERSITY:

- Member of the Academic Council of Mahatma Gandhi Central University since 18th November 2019
- Member of Research and Development Cell at Mahatma Gandhi Central University since 29th November 2019.
- Member of the committee constituted to carry out study for opening the Centre for Sustainable Development at Mahatma Gandhi Central University in 2020.
- Member of the Department Advisory Group for Department of Physics and Material Science at Madan Mohan Malaviya University of Technology, Gorakhpur, Uttar Pradesh, for Academic Session 2019-20.
- Vigilance-cum-Verification Officer at Mahatma Gandhi Central University since 17th October 2019.
- Chairperson, Guest House Administration Committee of Mahatma Gandhi Central University since 26th November 2019.
- Coordinator, Discipline Committee during 1st Convocation of Mahatma Gandhi Central University scheduled in January 2020.
- Member of the Internal Quality Assurance Cell (IQAC) of Mahatma Gandhi Central University in the line with the NAAC/UGC Guidelines from 14th April 2019 to 09th October 2019.
- Nodal Officer of Mahatma Gandhi Central University for NAD (National Academic Depository) Depository Services provided by NSDL Database Management Limited (NDML) under authorisation from University Grant Commission since 24th May 2017.
- Member of the Drafting Committee for finalization of the Draft Ordinance dealing with Convocation of Mahatma Gandhi Central University.
- Member of the Drafting Committee for finalization of the Draft Ordinance on "Medium of Instructions, Examinations, Evaluation and Grading System for the award of Doctor of Philosophy" for Mahatma Gandhi Central University.
- Chairperson of the Drafting Committee for finalization of the Draft Ordinance on "Medium of Instructions, Examinations, Evaluation and Grading System for Postgraduate Programmes / PG Diploma / Diploma / Certificate" for Mahatma Gandhi Central University.
- Member of the Fee Structure Review Committee of the University to scrutinize and review the existing Fee Structures.
- Chairman of the Drafting Committee for finalization of the Draft Ordinance on "Medium of Instruction, Examination, Evaluation and Grading System" for Mahatma Gandhi Central University.

- Nodal Officer, Central Universities Common Entrance Test (CUCET-2019) for Mahatma Gandhi Central University held on 25-26 May 2019.
- Coordinator of Master Entrance Test 2018 examination of Mahatma Gandhi Central University held on 07th October 2018.
- Coordinator of Entrance Exam for UG and PG Test 2017 of Mahatma Gandhi Central University held on 23rd July 2017.
- Chairperson and Convener of School Board in the School of Physical & Material Sciences at Mahatma Gandhi Central University, Motihari, Bihar from 31st October 2017 to 28th October 2019.
- Chairman and Convener of Board of Studies of Department of Physics in the School of Physical & Material Sciences at Mahatma Gandhi Central University, Motihari, Bihar from 12th May 2017 to 10th October 2019.
- Chairman and Convener of Board of Studies of Department of Chemistry in the School of Physical & Material Sciences at Mahatma Gandhi Central University, Motihari, Bihar from 12th May 2017 to 24th August 2017.
- Vice-Chancellor nominee as a member of Board of Studies of Department of Mathematics in the School of Mathematics & Statistical Sciences at Mahatma Gandhi Central University, Motihari, Bihar since 12th May 2017.
- Vice-Chancellor nominee as a member of Board of Studies of Department of Computer Science & Information Technology in the School of Computer Sciences & Information Technology at Mahatma Gandhi Central University, Motihari, Bihar since 12th May 2017.
- Vice-Chancellor nominee as a member of School Board in the School of Computer Sciences & Information Technology at Mahatma Gandhi Central University, Motihari, Bihar since 12th May 2017.
- Vice-Chancellor nominee to attend Academic Leadership Training Program (Type-I) held at Central University of South Bihar, Gaya from 19th February to 22nd February 2018 representing Mahatma Gandhi Central University.
- Vice-Chancellor nominee to attend the meeting of Innovation Clubs (FOIN 2017) held at Rashtrapati Bhavan on 08.03.2017 representing Mahatma Gandhi Central University.
- Officiating Head of Department of Chemistry at Mahatma Gandhi Central University from 21st November 2016 to 24th August 2017.
- Chairperson, Anti Ragging Squad of the Mahatma Gandhi Central University from 23rd November 2016 to 09th September 2017.
- Member of Anti Ragging Monitoring Cell, Member Secretary and Convenor of Antiragging Committee of Mahatma Gandhi Central University from 19th January 2017 to 09th September 2017.
- Centre Superintendent of Mid Term Examinations at Mahatma Gandhi Central University during 26-30 December 2016.
- Nodal Officer for celebration of 4th International Day of Yoga 2018 held at Mahatma Gandhi Central University on 21st June 2018.
- Member of the Prospectus committee for the Academic Session 2019-20 at Mahatma Gandhi Central University.
- Member of the Prospectus committee for the Academic Session 2018-19 at Mahatma Gandhi Central University.
- Member of Advisory Committee for finalization of Prospectus for 2017-18 at Mahatma Gandhi Central University.
- Convener, Program Committee for One Day National Workshop on Draft National Education Policy, held at All India Institute of Medical Sciences (AIIMS), Patna on 17th July 2019.
- Nodal Officer, University Entrance Exam-2019 (UG/PG/M.Phil/PhD) held from 27.07.2019 to 28.07.2019.
- Centre Superintendent of End Term Examinations at Mahatma Gandhi Central University during 09-17 December 2019

9. MEMBERSHIP OF SOCIETIES / PROFESSIONAL BODIES:

• Life member of Indian Society of Solid State Ionics.

10. PUBLICATIONS :

A. BOOKS/MONOGRAPHS:

1. Authored: Nil

2. Edited: 02

- Polymeric gel electrolytes based electrochemical supercapacitors
 S. A. Hashmi and S. K. Tripathi
 Published in *Electroactive Polymers: Materials & Devices, Vol.1; Eds. N.Khare, S.A.Hashmi, Amita Chandra and Amreesh Chandra, Series Ed. Suresh Chandra* 01(2006)168-181.
 Allied Publishers Private Limited, New Delhi, India (ISBN Nos.: 81-8424-149-6)
- II. Electrical characterization of ionic liquid based magnesium ion conducting polymer gel electrolytes
 Ashish Gupta and S. K. Tripathi
 Published in *Energy Storage and Conversion: Materials and Devices; Eds. Ashok Kumar and Shyamal Kumar Das* (2016) 133-141.
 Narosa Publishing House, New Delhi, India (ISBN Nos.: 978-81-8487-505-8)

B. PAPERS IN REFEREED/PEER REVIEWED JOURNALS:

- Synergistic Approach with Redox Additive for the Development of Environment Benign Hybrid Supercapacitor
 Dharmendra Jain, Jitendra Kanungo and S. K. Tripathi
 Journal of The Electrochemical Society (The Electrochemical Society, USA), 166(14)(2019)A1-A14
- Synergistic Effect of Redox Couple VO²⁺/VO₂⁺ with H₃PO₄ to Enhance the Supercapacitor Performance
 Dharmendra Jain, Jitendra Kanungo and S. K. Tripathi
 Journal of Materials Science: Materials in Electronics (Springer), 30(2019)12244-12259
- Performance enhancement approach for supercapacitor by using mango kernels derived activated carbon electrode with p-hydroxy aniline based redox additive electrolyte Dharmendra Jain, Jitendra Kanungo and S. K. Tripathi Materials Chemistry and Physics (Elsevier), 229(2019)66-77
- iv. Enhanced performance of ultracapacitors using redox additive based electrolytes Dharmendra Jain, Jitendra Kanungo and S. K. Tripathi Applied Physics A: Material Science & Processing (Springer), 124(2018)397(1-14)
- v. Synthesis and characterization of nano-composite NiO/activated charcoal electrodes for supercapacitor application
 Mahendra Singh Yadav and S. K. Tripathi Ionics (Springer), 23(2017)2919-2930
- vi. Electrical studies on ionic liquid based gel polymer electrolyte for its application in EDLCs Mukta Tripathi and S. K. Tripathi Ionics (Springer), 23(2017)2735-2746

- vii. Nano-porous activated carbon from sugarcane waste for supercapacitor application Amrita Jain and **S. K. Tripathi** Journal of Energy Storage (Elsevier), 4(2015)121-127
- viii. Almond Shell Based Activated Nano-Porous Carbon Electrode for EDLCs Amrita Jain and S. K. Tripathi Ionics (Springer), 21(2015)1391-1398
- ix. Effect of nano-filler on the performance of MWCNTs based EDLCs Amrita Jain and S.K. Tripathi Journal of Renewable and Sustainable Energy (American Institute of Physics), 6(2014)013108
- Fabrication and Characterization of Energy Storing Supercapacitor Devices using Coconut Shell based Activated Charcoal Electrode Amrita Jain and S.K. Tripathi Materials Science and Engineering B (Elsevier), 183(2014)54-60
- xi. Converting Eucalyptus Leaves into Mesoporous Carbon for its Application in Quasi Solid-State Supercapacitors
 Amrita Jain and S.K. Tripathi Journal of Solid State Electrochemistry (Springer), 17(2013)2545-2550
- xii. Studies on Redox Supercapacitor using electrochemically synthesized polypyrrole as electrode material using blend polymer gel electrolyte
 S. K. Tripathi, Amrita Jain, Ashish Gupta and Manju Kumari Indian Journal of Pure and Applied Physics, 51(2013)315-319
- xiii. Electrochemical studies on nano composite polymer electrolytes
 S. K. Tripathi, Ashish Gupta, Amrita Jain and Manju Kumari Indian Journal of Pure and Applied Physics, 51(2013)358-361
- xiv. Fabrication and characterization of electrochemical double layer capacitors using ionic liquid based gel polymer electrolyte with chemically treated activated charcoal electrodes Amrita Jain, S K Tripathi, Ashish Gupta and Manju Kumari Journal of Solid State Electrochemistry (Springer), 17 (2013) 713-726
- xv. Experimental studies on high performance supercapacitor based on nano gel polymer electrolyte with treated activated charcoal Amrita Jain and S. K. Tripathi Ionics (Springer), 19 (2013) 549-557
- Studies on electrical conductivity and dielectric behaviour of PVdF-HFP-PMMA-Nal polymer blend electrolyte
 S. K. Tripathi, Ashish Gupta and Manju Kumari Bulletin of Materials Science (Springer), 35(6) (2012) 969-975
- xvii. Electrical and Electrochemical studies on magnesium ion based polymer gel electrolytes
 S. K. Tripathi, Amrita Jain, Ashish Gupta and Manju Mishra Journal of Solid State Electrochemistry (Springer), 16 (2012)1799-1806
- xviii. Experimental studies on poly-methyl-methacrylate based gel polymer electrolytes for application in electrical double layer capacitors
 S. A. Hashmi, Ashok Kumar and S. K. Tripathi
 Journal of Physics-D: Applied Physics (IOP), 40(2007)6527-6534

- xix. Electrochemical redox supercapacitors using PVdF-HFP based gel electrolytes and polypyrrole as conducting polymer electrode
 S. K. Tripathi, Ashok Kumar and S. A. Hashmi Solid State Ionics (Elsevier), 177(2006)2979-2985
- xx. Investigations on electrochemical supercapacitors using polypyrrole redox electrodes and PMMA based gel electrolytes
 S. A. Hashmi, Ashok Kumar and S. K. Tripathi
 European Polymer Journal (Elsevier), 41(2005)1373-1379
- xxi. Experimental studies on Solid State Electrical Double Layer Capacitors using Activated Charcoal Powder Electrodes and Poly Vinylidine fluoride co-Hexa Fluro propylene-based Gel Electrolytes
 S. A. Hashmi, Ashok Kumar and S. K. Tripathi Ionics (Springer), 10(2004)213-220

C. PAPERS IN CONFERENCES PROCEEDINGS:

i. Studies on nano gel polymer electrolyte-based supercapacitors Manju Mishra, S. N. Dixit and **S. K. Tripathi**

International Journal of Computer Application (IJCA), New York, USA, *Proceedings on National Conference on Role of Engineers in National Building NCRENB-2016*, 4(6) (2016)24-27, ISBN: 973-93-80892-55-3

ii. Electrochemical studies on PVdF(HFP)-PC-Mg(ClO₄)₂-SiO₂ based nanocomposite polymer electrolyte films

S. K. Tripathi, Ashish Gupta, Amrita Jain and Manju Kumari,

Proceedings of National Conference on Recent Trends in Materials Science (RTMS-2011) organized by Jaypee University of Information Technology, Waknaghat, Himachal Pradesh from October 08-10, 2011; P-**92(2011).**

Studies on Electrical double layer capacitors using magnesium ion-based polymer gel electrolyte with activated charcoal-based electrodes
 S. K. Tripathi, Amrita Jain, Ashish Gupta and Manju Kumari,

Proceedings of National Conference on Recent Trends in Materials Science (RTMS-2011) organized by Jaypee University of Information Technology, Waknaghat, Himachal Pradesh from October 08-10, 2011; P-**93(2011)**.

iv. Experimental studies on PVdF(HFP)-PMMA blend based polymer gel electrolytes for its application in Redox Supercapacitors
 S. K. Tripathi, Amrita Jain, Ashish Gupta and Manju Kumari,

Proceedings of National Conference on Recent Trends in Materials Science (RTMS-2011) organized by Jaypee University of Information Technology, Waknaghat, Himachal Pradesh from October 08-10, 2011; P-**104(2011).**

v. Superionic solid and its possible application in energy storage devices: An overview S. K. Tripathi

Learning Manual "NWESD-2012" of National Workshop on Energy Storage/Conversion Devices using Ion Conducting Polymer Electrolyte [NWESD-2012] held at Jaypee University of Engineering and Technology, Guna, Madhya Pradesh from December 10-12, 2012; *pp* 110-128(2012).

11. Patents/Copyrights /IPR (If Any)

Nil

12. INVITED TALKS:

- 1) Resource Person at First Faculty Induction Program held at Mahatma Gandhi Central University, Bihar, India from 13-20 January 2020.
- Invited Lecture on "Ultracapacitors as an alternative Electrochemical Energy Storage Devices" during National Conference on Smart Materials, Devices and Sustainable Technologies (SMDST-2019) held at Madan Mohan Malaviya University of Technology, Gorakhpur, Uttar Pradesh, India from 15-16 March 2019.
- Distinguished Lecture on "Exploiting Graphene and its derivative for energy storage applications" during 12th National Conference on Solid State Ionics (NCSSI-12) held at Department of Physics, BITS Pilani, Rajasthan, India from 21-23 December 2017.
- 4) Invited Lecture on "Utilization of bio-waste for its application in energy storage" during Short Term Course on Emerging Trends in Material Science [STCETMS-2017] held at Madan Mohan Malaviya University of Technology, Gorakhpur, Uttar Pradesh, India from 23-29 March 2017.
- 5) Resource Person in Workshop on 'Transacting Students' Engagements for Promoting Rural Resilence organized by Mahatma Gandhi Central University & National Council of Rural Institutes on topic entitled "Development of Scientific Temper" held at Mahatma Gandhi Central University on 22-23 March 2017.
- 6) Invited Lecture on "2D Nanomaterials for Supercapacitor Applications: An Overview" during 15th Asian Conference on Solid State Ionics [ACSSI-2016] held at Indian Institute of Technology Patna, India from 27-30 November 2016.
- 7) Resource Person in Research Training Workshop on Concept & Practise of Materials Characterization held at Indian Institute of Technology Patna, India from 24-26 November 2016.
- Invited Lecture on "Recent progress in the development of Supercapacitors" during 11th National Conference on Solid State Ionics [NCSSI-11] held at Tezpur University, Assam, India from 21-23, December 2015.
- Expert Lecture on "Nanomaterials for Electrochemical Energy Storage Devices" at Maharana Pratap College of Technology (MPCT), Gwalior during National Conference on VLSI, Communication and Nanoelectronics from 02-03 May, 2014.
- 10) Guest Lecture on "Introduction to Superionic Solids and its possible applications in electrochemical double layer capacitors" at Centre of Nanotechnology, Rajasthan Technical University, Kota, Rajasthan on 01, September 2013.
- 11) Invited Lecture on "Solid State Electrochemical Devices: An Overview" at Aartech Solonics Industries, Bhopal on 20.02.2012.

- 12) Special Lecture on "Sir. C. V. Raman" at JUET, Guna on 10.05.2012 during the occasion of Valedictory functions of the National Science Day.
- 13) Invited Lecture on "Superionic Solids and its Application in Energy Storage/Conversion Devices" at JUET, Guna on 07.06.2012 during IUCEE (Indo-US Collaboration for Engineering Education) Workshop on Renewable Energy (04-08 June, 2012).
- 14) Resource Person for "National Workshop on Energy Storage/Conversion Devices using Ion Conducting Polymer Electrolyte [NWESD-2012]" held at Jaypee University of Engineering and Technology, Guna, Madhya Pradesh, India from 10-12, December 2012.

13. RESEARCH PROJECTS (COMPLETED / ONGOING):

- "Investigation of production parameters of supercapacitor electrodes and their influence on electrical performance" funded by Department of Science and Technology (DST), Govt. of India under DST-DAAD 2016 schemes, which is a project based personnel exchange programme under Indo-German joint research collaboration, vide File No. DST/INT/FRG/DAAD/P-27/2017. Status: Completed [17.07.2017 to 16.07.2019] 02 Yrs
- "Fabrication and characterization of solid-state supercapacitors using polymeric gel electrolytes" funded by Department of Science and Technology (DST), Govt. of India under the scheme of SERC Fast Track Proposals for Young Scientist, vide D.O. Nos. SR/FTP/PS-02/2007; Dated: 30.07.2008 Status: Completed [01.09.2008 to 31.03.2012] 03 Yrs 07 Months
- "Synthesis and characterization of nano-gel polymer electrolyte for its application in energy storing supercapacitor devices" funded by Madhya Pradesh Council of Science and Technology (MPCST), Govt. of Madhya Pradesh, India, vide Letter Nos. 3683/CST/R&D/Phy & Engg Sc/2012, Bhopal; Dated: 12.11.2012 (File. Nos. A/R&D/RP-02/2012/201)
 Status: Completed [01.04.2013 to 31.12.2015] 02 Yrs 08 Months

14. PARTICIPATION & PRESENTATIONS IN SEMINARS/SYMPOSIA/WORKSHOPS/CONFERENCES:

 Studies on Ion-Conducting Polymeric Gel Electrolyte based All-Solid-State Electrical Double Layer Supercapacitors
 S. K. Tripathi, Ashok Kumar and S. A. Hashmi

Presented for ISCA Young Scientist Award in 91st Indian Science Congress Association [ISCA-2004] held at Panjab University, Chandigarh from 03- 07 January 2004.

2) Polymeric Gel Electrolytes Based Solid State Electrochemical Redox Supercapacitors S. K. Tripathi, Ashok Kumar and S. A. Hashmi

Presented in 6th National Conference on Solid State Ionics [NCSSI-2004] held at Jadavpur University, Kolkata from 05- 07 October 2004.

Electrochemical Supercapacitors using polypyrrole and polypyrrole-cobalt oxide electrodes with PMMA based gel electrolytes
 S. A. Hashmi, Ashok Kumar and S. K. Tripathi

Presented in International Conference on Electroactive Polymers [ICEP-2004] held at Dalhausie, Himachal Pradesh, India from November 01-05 November 2004.

4) Polymeric gel electrolytes based electrochemical supercapacitors S. A. Hashmi and **S. K. Tripathi** Presented in International Conference on Electroactive Polymers [ICEP-2004] held at Dalhausie, Himachal Pradesh, India from November 01-05 November 2004.

5) Electrochemical supercapacitors based on amorphous MnO₂ electrodes and polymeric gel electrolytes **S. K. Tripathi,** Ashok Kumar and S. A. Hashmi

Presented for ISCA Young Scientist Award in 92nd Indian Science Congress Association Conference [ISCA-2005] held at Nirma University of Science & Technology, Ahmedabad, Gujrat, India in Materials Science section of the conference from January 03-07 January 2005.

Preliminary Studies on Nal based Composite Polymer Electrolyte
 S. K. Tripathi, Ashish Gupta, L. N. Gupta and Manju Kumari

Presented in 8th National conference on Solid State Ionics [NCSSI-2009] held at Sagar, Madhya Pradesh, India from 07-09 December 2009.

Ionic conductivity studies on NaSCN based Composite Polymer Gel Electrolyte
 S. K. Tripathi and Ashish Gupta

Presented in 8th National conference on Solid State Ionics [2009] held at Sagar, Madhya Pradesh, India from 07-09 December 2009.

8) Preliminary Studies on hybrid supercapacitors using Impedance Spectroscopy **S. K. Tripathi,** Ashish Gupta, L. N. Gupta and Manju Kumari

Presented in 13th Annual Conference of Vijnana Parishad of India & National Symposium on Recent Developments in Applicable Mathematics & Information Technology held at Guna, Madhya Pradesh, India from 04-06 December 2009.

9) Optimization of polymer gel electrolytes for its application in energy storage devices **S. K. Tripathi,** Ashish Gupta, L. N. Gupta and Manju Kumari

Presented in 13th Annual Conference of Vijnana Parishad of India & National Symposium on Recent Developments in Applicable Mathematics & Information Technology held at Guna, Madhya Pradesh, India from 04-06 December 2009.

 Studies on electrical conductivity and dielectric behaviour of PVdF-HFP-PMMA-Nal composite polymer electrolyte
 K. Tripathi, Ashish Gupta and Manju Kumari

Presented in National Conference on Recent Trends in Exotic Materials held at Sharda University, Greater Noida from 26-28 August 2010.

11) Preliminary studies on PEG / PVdF (HFP)-based polymer blend electrolytes **S. K. Tripathi,** Ashish Gupta, Amrita Jain and Manju Kumari

Presented in National Conference on "Recent Advances in Materials Science & Engineering: A Multidisciplinary Approach" held at Jaypee University of Engineering and Technology, Guna from 23-24 October 2010.

12) Preliminary Studies on Polypyrrole Based Redox Supercapacitor with PVdF-HFP-EC-PC-NaSCN Polymer Gel Electrolytes

S. K. Tripathi, Amrita Jain, Ashish Gupta and Manju Kumari

Presented in National Conference on "Recent Advances in Materials Science & Engineering: A Multidisciplinary Approach" held at Jaypee University of Engineering and Technology, Guna from 23-24 October 2010.

13) Comparative Studies on Redox Supercapacitors using polypyrrole electrodes and PMMA based gel electrolytes with different anionic size S. K. Tripathi, Amrita Jain, Ashish Gupta and Manju Kumari

Presented in International Conference on Materials for Advanced Technologies [ICMAT-2011] held at Suntec, Singapore from 26 June 2011 to 01 July 2011.

14) Electrical and Electrochemical studies on magnesium ion-based polymer gel electrolytes S. K. Tripathi, Amrita Jain, Ashish Gupta and Manju Kumari

Presented in International Conference on Materials for Advanced Technologies [ICMAT-2011] held at Suntec, Singapore from 26 June 2011 to 01 July 2011.

15) Studies on Electrical double layer capacitors using magnesium ion-based polymer gel electrolyte with activated charcoal-based electrodes

S. K. Tripathi, Amrita Jain, Ashish Gupta and Manju Kumari

Presented in National Conference on Recent Trends in Materials Science [RTMS-2011] held at Jaypee University of Information Technology, Waknaghat, Solan, H.P from 8-10 October 2011.

16) Experimental studies on PVdF(HFP)-PMMA blend based polymer gel electrolytes for its application in **Redox Supercapacitors** S. K. Tripathi, Amrita Jain, Ashish Gupta and Manju Kumari

Presented in National Conference on Recent Trends in Materials Science [RTMS-2011] held at Jaypee University of Information Technology, Waknaghat, Solan, H.P from 8-10 October 2011.

17) Electrochemical studies on PVdF(HFP)-PC-Mg(ClO₄)₂-SiO₂ based nanocomposite polymer electrolyte films

S. K. Tripathi, Ashish Gupta, Amrita Jain and Manju Kumari

Presented in National Conference on Recent Trends in Materials Science [RTMS-2011] held at Jaypee University of Information Technology, Waknaghat, Solan, H.P from 8-10 October 2011.

18) Electrochemical studies on nanocomposite polymer electrolytes S. K. Tripathi, Ashish Gupta, Amrita Jain and Manju Kumari

Presented in Ninth National Conference on Solid State Ionics (NCSSI-09) held at Jaypee Institute of Information Technology, Noida from 15-17 Dec 2011.

19) Studies on redox supercapacitor using electrochemically synthesized polypyrrole as electrode material using blend polymer gel electrolyte S. K. Tripathi, Amrita Jain, Ashish Gupta and Manju Kumari

Presented in Ninth National Conference on Solid State Ionics (NCSSI-09) held at Jaypee Institute of Information Technology, Noida from 15-17 December 2011.

20) Preliminary studies on Carbon-Cobaltite composite electrode materials for redox supercapacitors S. K. Tripathi, Amrita Jain, Ashish Gupta and Manju Kumari

Presented in Ninth National Conference on Solid State Ionics (NCSSI-09) held at Jaypee Institute of Information Technology, Noida from 15-17 December 2011

21) Experimental Studies on Electrical Double Layer Supercapacitors using chemically treated activated charcoal powder with blend polymer gel electrolytes
 S. K. Tripathi, Amrita Jain, Ashish Gupta and Manju Kumari

Presented in 6th Asian Conference on Electrochemical Power Sources, held at Hotel Green Park, Chennai, India from 05-08 January 2012

Studies on Coconut Shell Electrode for its application in electrical double layer capacitor using poly methyl methacrylate-based gel electrolytes
 S. K. Tripathi, Amrita Jain, Ashish Gupta and Manju Kumari

Presented in 6th Asian Conference on Electrochemical Power Sources, held at Hotel Green Park, Chennai, India from 05-08 January 2012

23) Effect of monovalent anion on capacitive behaviour of polypyrrole based redox supercapacitor **S. K. Tripathi,** Amrita Jain, Ashish Gupta and Manju Kumari

Presented in International Conference on Recent Trend in Physics 'ICRTP 2012', held at Devi Ahilya Vishwavidyalaya, Indore, India from 04-05 February 2012

24) Studies on EDLCs using coconut shell based activated charcoal with polymer blend electrolytes Amrita Jain and S. K. Tripathi

Presented in 19th International Conference on Solid State Ionics [ICSSI-19], held at Kyoto, Japan from 02-07 June 2013

25) Experimental studies on ionic liquid based magnesium ion conducting polymer gel electrolytes **S. K. Tripathi** and Ashish Gupta

Presented in 19th International Conference on Solid State Ionics [ICSSI-19], held at Kyoto, Japan from 02-07 June 2013

26) Electrical properties of nanocomposite polymer gel electrolyte doped with ZnO nano-filler Dharmendra Jain, Dhirendra Mathur and **S. K. Tripathi**

Presented in 11th National Conference on Solid State Ionics [NCSSI-11], held at Tezpur University, Assam from 21-23 December 2015.

27) Preliminary studies on ionic liquid based polymer electrolyte Peeyush Rathore, Dharmendra Jain, Sanjeev Mishra, Mukta Tripathi and S. K. Tripathi

Presented in 11th National Conference on Solid State Ionics [NCSSI-11], held at Tezpur University, Assam from 21-23 December 2015.

28) Studies on EDLCs using chemically treated activated charcoal with blend polymer electrolytes Amrita Jain and **S K Tripathi**

Presented in 11th National Conference on Solid State Ionics [NCSSI-11], held at Tezpur University, Assam from 21-23 December 2015.

29) Electrical characterisation of ionic liquid based magnesium ion conducting polymer gel electrolytes Ashish Gupta and **S. K. Tripathi**

Presented in 11th National Conference on Solid State Ionics [NCSSI-11], held at Tezpur University, Assam from 21-23 December 2015.

30) Synthesis and optical characterization of zinc oxide nanoparticles Mahendra Singh Yadav and **S. K. Tripathi**

Presented in 11th National Conference on Solid State Ionics [NCSSI-11], held at Tezpur University, Assam from 21-23 December 2015.

31) Experimental studies of TiO₂ based nanocomposite gel polymer electrolytes Manju Mishra, Anand Tripathi, S. N. Dixit and **S. K. Tripathi**

Presented in "National level research symposium on recent advances and challenges in engineering and management [RACEM-2015], held at Vidyaalankar Institute of Technology, Wadala (East), Mumbai, Maharashtra, India" on 21 December, 2015

33) Studies on nano gel polymer electrolyte based supercapacitors Manju Mishra, S. N. Dixit and **S. K. Tripathi**

Proceedings of National Conference on Role of Engineers in Nation Building (NCRENB-2016) organized by VIVA Institute of Technology, Shirgaon, Virar(E), Palghar-401305, Maharashtra, India from March 03-04, 2016

34) 2D Nanomaterials for Supercapacitor Applications: An Overview **S. K. Tripathi** and Amrita Jain

Presented in 15th Asian Conference on Solid State Ionics [ACSSI-2016] held at Indian Institute of Technology Patna, India from 27-30 November 2016.

35) Research Training Workshop on Concept & Practise of Materials Characterization S. K. Tripathi

Resource Person in workshop held at Indian Institute of Technology Patna, India from 24-26 November 2016.

36) Development of Scientific Temper S. K. Tripathi

Resource Person in Workshop on 'Transacting Students' Engagements for Promoting Rural Resilence organized by Mahatma Gandhi Central University & National Council of Rural Institutes held at Mahatma Gandhi Central University on 22-23 March 2017.

37) Utilization of bio-waste for its application in energy storageS. K. Tripathi

Presented Invited Talk during Short Term Course on Emerging Trends in Material Science [STCETMS-2017] held at Madan Mohan Malaviya University of Technology, Gorakhpur, Uttar Pradesh, India from 23-29 March 2017.

Exploiting Graphene and its derivative for energy storage applications
 K. Tripathi

Presented as Distinguished Lecture during 12th National Conference on Solid State Ionics (NCSSI-12) held at Department of Physics, BITS Pilani, Rajasthan, India from 21-23 December 2017.

39) Ultracapacitors as an alternative Electrochemical Energy Storage Devices S. K. Tripathi Presented Invited Talk during National Conference on Smart Materials, Devices and Sustainable Technologies (SMDST-2019) held at Madan Mohan Malaviya University of Technology, Gorakhpur, Uttar Pradesh, India from 15-16 March 2019.

15. AWARDS, FELLOWSHIPS & OTHER DISTINCTIONS:

- Received **"DST-DAAD Fellowship"** which is a project based personnel exchange programme under Indo-German joint Research Collaboration funded jointly by Government of India and Government of Germany from 17th July 2017 to 16th July 2019.
- Recipient of **"ISCA Young Scientist Award"** in the Materials Science section of the 92nd Conference of the Indian Science Congress Association, held at Nirma University of Science and Technology, Ahmedabad, Gujrat, India from 03-07 January, 2005.
- Recipient of "Prof. Suresh Chandra Medal" for best paper presented (Young Scientist) in 6th National Conference on Solid State Ionics, held at Jadavpur University, Kolkata, India from 5-7 October, 2004.

1. ANY OTHER SIGNIFICANT INFORMATION:

Conference / Workshop Organized:

- 1) **Convener** of the "National Workshop on Energy Storage/Conversion Devices using Ion Conducting Polymer Electrolytes [NWESD-2012]" held at Jaypee University of Engineering and Technology (JUET), Guna, Madhya Pradesh, India from 10-12, December 2012.
- 2) **Co-Convener** of the National Conference on "Physics and Chemistry of Advanced Materials" held at Mahatma Gandhi Central University, Bihar, India from 22-23 November, 2019.
- 3) Member of the National Advisory Committee of the "International Conference on Frontier Areas of Chemistry" held at Mahatma Gandhi Central University, Bihar from 28-29 February 2019.
- 4) Member of the National Organizing Committee of "15th Asian Conference on Solid State Ionics", scheduled to be held at Indian Institute of Technology Patna from 27-30 November, 2016.
- 5) Member of the organizing committee of "National workshop on Applicable Mathematics to Engineering and Sciences (NWAMES)", scheduled to be held at Jaypee University of Engineering and Technology (JUET), Guna, Madhya Pradesh, India from 30 May to 01 June 2016.
- Member of the local organizing committee of "Ninth National Conference on Solid State Ionics [NCSSI-9]" held at Jaypee Institute of Information Technology University, Noida, Uttar Pradesh, India from 15-17, December 2011.
- 7) Member of the sub-committees of the "National Conference on Recent Advances in Materials Science & Engineering: A Multidisciplinary Approach [RAMSE-2010]" held at Jaypee University of Engineering and Technology (JUET), Guna, Madhya Pradesh, India from 23-24, October, 2010.

Available as a Reviewer for International Journal:

- 1) Nanoscale (Royal Society of Chemistry).
- 2) Journal of Materials Chemistry-A (Royal Society of Chemistry).
- 3) Physical Chemistry Chemical Physics (Royal Society of Chemistry).
- 4) RSC Advances (Royal Society of Chemistry).
- 5) Chemical Communication (Royal Society of Chemistry).
- 6) ACS Applied Materials & Interfaces (American Chem. Society).
- 7) ACS Energy Letters (American Chemical Society).
- 8) Science of Advanced Materials (American Scientific Publisher).
- 9) Materialstoday: Proceedings (Elsevier, ScienceDirect).
- 10) Electrochimica Acta (Elsevier, ScienceDirect).
- 11) International Journal of Industrial Chemistry (Springer).
- 12) Ionics (Springer).

- 13) Journal of Solid State Electrochemistry (Springer).
- 14) Electrochemical Society Journal (U.S.A)
- 15) Chinese Journal of Chemical Physics (IOP).
- 16) Applied Surface Science (Elsevier, ScienceDirect).

Extra Co-curricular activity:

- Trained as a "Zonal Master Resource Person's" for North-Eastern States & Sikkim zone of India on "International Year of Physics-2005" held at The Institution of Engineers, Guwahati, India during June 15-17, 2005 organised by Assam Science Technology and Environment Council, Guwahati, India, in collaboration with the Rashtriya Vigyan Evam Prodyogiki Sanchar Parishad (RVPSP) and Vigyan Prasar of Department of Science and Technology, Government of India.
- Participated in DST Sponsored "SERC School in Condensed Matter And Material Physics" at School of Materials Science and Technology, Institute of Technology, Banaras Hindu University, Varanasi from 01-28 March, 2006.

(Santosh Kumar Tripathi)