

CURRICULUM VITAE

Dr. L. C. NEHRU

HOME ADDRESS:

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1. OBJECTIVE :

To obtain a position that will enable me to use my strong organizational skills, Educational background, and ability to work well with people.

SUMMARY: Expertise in materials research & device development with emphasis in nano-scale science & engineering. Strength in reduced complexity design & fabrication of semiconductor electronic devices. Specific interest in development of novel electronic devices based on semiconductor nano-materials.

2. PERSONAL INFORMATION:

Name : L. C. Nehru
Date of birth : 29th March 1975
Father's name : Mr. L. Chellappan
Education : M.Sc (Physics), Ph.D in Physics
Present position : Research Associate (CSIR),
School of Physics, Alagappa University,
Karaikudi – 630 003, Tamilnadu, INDIA.
Title of Ph.D thesis : “Preparation and characterization of metal oxide nanopowders by
microwave-assisted combustion method for gas sensing devices”
Ph.D Supervisor : **Prof. C. Sanjeeviraja**,
Chairperson and Head, School of Physics (Science Block),
Alagappa University, Karaikudi – 630 002, Tamilnadu, INDIA.

3. AREA OF SPECIALIZATION:

- The preparation and properties of wide-band-gap semiconductor metal oxides nanoparticles and thin films are very important and useful because of its application in the formation of battery, low cost solar cells, photo-voltaic devices and in some other opto-electronic devices,
- Nanomaterial synthesis and characterization for devices and atmospheric trace gas sensor and nanosized powders for energy conversion applications via capping method, sol-gel, co-precipitation, solvothermal, solution combustion technique and microwave-assisted combustion method etc.,
- Designed and fabricated thin film deposition of PVD & CVD techniques.

- My Ph.D thesis can be used in Solar cells, Photoconductor, gas sensor and so many smart device applications.
- Written and verbal presentation of research results.
- Publication track record in nanoparticle preparation and characterization.

4. POSITION AT A GLANCE:

- Currently working as Research Associate (CSIR) in School of Physics, Alagappa University, Karaikudi – 630 003, Tamilnadu, INDIA.
- Worked as a **Research Associate** (from Feb 2011 to March 2012) in Department of Physics, Mother Teresa Women’s University, Kodaikanal- 624 101, Tamilnadu, INDIA.
- **Research Fellowship** (from Oct 2006 to Dec 2010), UGC Research Fellowships in Sciences for Meritorious Students (RFSMS) in School of Physics, Alagappa University, Karaikudi – 630 003, Tamilnadu, INDIA.
- Worked as a **Project Assistant** (from July 1999 to Sep 2006) at various research projects in Electrochemical Materials Science Division, Central Electrochemical Research Institute, Karaikudi - 630 006, Tamilnadu, INDIA,
- Worked as a **Project Trainee** (from June 1998 to June 1999) in Corrosion Division, Central Electrochemical Research Institute, Karaikudi - 630 006, Tamilnadu, INDIA,

5. SCIENTIFIC INTERESTS AND TECHNOLOGICAL ACTIVITIES:

- ❖ Nanotechnology: functionalization - characterization – application,
- ❖ Shape- and finite-size effects in electronic and magnetic nanomaterials,
- ❖ Interface between physical, chemical and life sciences,
- ❖ Non-vacuum synthesis and interpretation of novel inorganic-organic high band gap semiconductor nanostructures and non-toxic thin films for renewable energy sources and sensor applications (junctions, contacts, range of operation, etc.),
- ❖ Nanotechnology for next generation solar cells.
- ❖ Thin film technology: - Nano Coatings.
- ❖ Deposition of thin and thick coatings by using (RF & DC) sputtering system, optical coatings and Anti-reflective coatings by Sol-Gel techniques.
- ❖ Surface Modification: Plasma and laser treatment.
- ❖ Structural Characterization of Different Type of Films.
- ❖ HRSEM, AFM, XRD, Raman Spectra and Ellispometer.
- ❖ Sol-Gel technique:- Water based Solvents and Nanopowders.

6. ANALYTICAL AND INSTRUMENTAL SKILLS:

About 10 years of my research experience has provided me with plenty of experience. I am expertise in design, fabrication, optimization, analysis of semiconductor metal oxides and hands-on testing/characterization of various sophisticated instrument like operations, maintenance and analytical knowledge is listed below:

- Excellent synthesis and characterization lab skills
- PVD & CVD techniques like e-beam evaporation, thermal evaporation, Pulsed Laser deposition, RF/AC/DC magnetron sputtering in a high vacuum system and spin-coating, dip-coating, spray deposition, wet chemical bath deposition etc., to fabricate multi-layers thin films of TCO semiconductor materials
- Synthesis of metal oxide nanoparticles preparation by sol-gel, co-precipitation, solution combustion method and microwave-assisted combustion method etc.,
- Powder X-ray Diffraction for phase identification and structure refinement by Rietveld Analysis (for Nano powder and Films).
- Particle specific surface area analysis (BET method),
- Scanning Electron Microscope (SEM),
- Transmission Electron Microscope (TEM),
- Atomic force microscopy (AFM),
- X-ray Photoelectron spectrometer (XPS),
- Energy Dispersive X-ray analysis (EDAX),
- Laser-Raman Spectrometer,
- Photoluminescence with low temperature measurements,
- Fourier Transforms Infrared Spectrophotometer (FT-IR),
- Thermal analysis of TGA/DTA and DSC,
- Diffused Reflectance and UV-VIS Spectrophotometer,
- Electrochemical measurement (Cyclic Voltametry, Impedance Spectroscopy),
- Electrical properties measurements by four point probe resistivity measurements and hall measurements,
- Current Voltage measurement (I-V),
- Atmospheric trace gas sensor measurement,
- Operating and accessory installing/repairing of vacuum coating unit including leak detection etc.,
- Extensive experience in managing new material & new process development,
- Solar PV & thermal product development.

7. SCIENTIFIC CONTRIBUTIONS

Papers published in International Journals	: 10
Papers accepted in International Journals	: 1
Papers Communicated in International Journals	: 1
Papers published in proceedings of International Conference/Technical meeting	: 4
Papers presented in International Conference/Symposium	: 14
Papers presented in National Conference/Symposium	: 29
National/International workshop attended	: 3

7a) Papers Published in International Journals:

1. Rapidly synthesis of nanocrystalline Zn_2SnO_4 spinal using microwave-assisted combustion method.
L. C. Nehru, V. Swaminathan, C. Sanjeeviraja
Communicated in “Journal of Nanoparticle Research”
2. ZnO nanoparticles by citric acid assisted microwave solution combustion method
L. C. Nehru, V. Swaminathan and C. Sanjeeviraja
Final revision in “Colloids and Surfaces A: Physicochemical and Engineering Aspects”
3. Rapid synthesis of nanocrystalline ZnO by a microwave-assisted combustion method.
L. C. Nehru, V. Swaminathan, C. Sanjeeviraja
“Powder Technology” (in press).
4. Photoluminescence studies on nanocrystalline tin oxide powder for optoelectronic devices.
L. C. Nehru, V. Swaminathan, C. Sanjeeviraja
“American Journal of Materials Science” (in press).
5. Studies on structural, optical and electrical properties of ZnO films prepared by the spray pyrolysis method
L. C. Nehru, M. Umadevi, C. Sanjeeviraja
International Journal of Materials Engineering 2(1) (2012) 12-17.
6. Nanomaterial preparations by microwave-assisted solution combustion method and material properties of SnO_2 powder —A status review.
L. C. Nehru, V. Swaminathan, M. Jayachandran and C. Sanjeeviraja
Materials Science Forum 671 (2011) 69-120.
7. Optoelectronic properties of nanocrystalline F-doped SnO_2 (FTO) films prepared by sol-gel spin coating technique.
N. Sankarasubramanian, K. Santhakumari, VS. Vidhya, **L. C. Nehru**, B. Subramanian, A. Thayumanavan, S. Ramamurthy, C. Sanjeeviraja, M. Jayachandran
Journal of Optoelectronics and Advanced Materials – 1 (2007) 417-424.

8. Spray pyrolysis deposition and characterization of highly (100) oriented magnesium oxide thin films.
A. Moses Ezhil Raj, **L. C. Nehru**, M. Jayachandran, C. Sanjeeviraja
Crystal Research Technology – 42 (2007) 867-875.
9. Synthesis and materials properties of transparent conducting In₂O₃ films prepared by sol-gel-spin coating technique.
E. Savarimuthu, K.C. Lalithambika, A. Moses Ezhil Raj, **L. C. Nehru**, S. Ramamurthy, K. Thayumanavan, C. Sanjeeviraja, M. Jayachandran
Journal of Physics and Chemistry of Solids – 68 (2007) 1380-1389.
10. Apatites and britholites are they akin – as probed by Eu²⁺ luminescence?
K. Marimuthu, **L. C. Nehru**, A. Mani, R. Ramesh, G. Muralidharan and R. Jagannathan
Journal of Physics: Condensed Matter 13 (2001) 537-547.
11. Ce³⁺ doped stillwellites: a new luminescence system with strong ion lattice coupling.
L. C. Nehru, K. Marimuthu, M. Jayachandran, Chung-Hsin Lu and R. Jagannathan
Journal of Physics D: Applied Physics 34 (2001) 2599-2605.
12. Synergistic interaction of indium and gallium in the activation of aluminum alloy in aqueous chloride solution.
J. Mathiyarasu, **L. C. Nehru**, P. Subramanian, N. Palaniswamy and N. S. Rengaswamy
Journal of Anti-corrosion Methods & Materials, Vol. 48, No. 5, (2001) 324-329.

7b) Papers Presented in International Symposium / Conferences:

1. Antimicrobial Activity of copper nanoparticles.
M. Umadevi, A. Jegatha Christy, **L. C. Nehru**, Ishwarya Devi
Presented in International Conference on “Nanomaterial and Applications (ICNMA-2012)” during 28-29th February 2012 at Mother Teresa Women’s University, Kodaikanal, Tamilnadu, INDIA (ISBN: 93-82062-00-9).
2. Green synthesis of silver nanoparticle using fruit extracts of ananas comosus.
M.R. Bindu, **L. C. Nehru**, M. Umadevi
Presented in International Conference on “Nanomaterial and Applications (ICNMA-2012)” during 28-29th February 2012 at Mother Teresa Women’s University, Kodaikanal, Tamilnadu, INDIA (ISBN: 93-82062-00-9).
3. Nanosized silver powder prepared by solution combustion method.
L. C. Nehru, M. Umadevi, A. Jegatha Christy
Presented in International Conference on “Nanomaterial and Applications (ICNMA-2012)” during 28-29th February 2012 at Mother Teresa Women’s University, Kodaikanal, Tamilnadu, INDIA (ISBN: 93-82062-00-9).

4. Structural and Morphological Studies of Nanostructured ITO Nanoparticle.
A. Ayeshamariam, C. Sanjeeviraja, M. Jayachandran and **L.C.Nehru**
Proceedings in International Conference on “Advanced Materials (ICAM – 2011)” during 12–16th December 2011 at Department of Physics, PSG College of Technology, Coimbatore, Tamilnadu, INDIA.
5. Thermal studies on nanocrystalline tin oxide.
L. C. Nehru, A. Ayesha Mariam, Velumani Subramaniam, M. Jayachandran and C. Sanjeeviraja
“XVIII International Materials Research Congress (IMRC -2009)” during 16-21th August 2009 at Cancūn, Mexico.
6. Preparation of zinc doped tin oxide (SnO₂:Zn) nanocrystalline materials by coprecipitation method.
L. C. Nehru, M. Jayachandran and C. Sanjeeviraja
6th International Symposium on “Transparent Oxide Thin films for Electronics and Optics” during 15-17th April 2009 at Tokyo, Japan.
7. Nanocrystalline properties of zinc doped tin oxide (SnO₂:Zn) powder prepared by sol-gel method for spintronic application.
L. C. Nehru, A. Ayesha Mariam, V. Swaminathan, M. Jayachandran and C. Sanjeeviraja
“AsianNano 2008” during 3-7th November 2008 organized by the MRS & IMRE at Singapore.
8. Raman and Photoluminescence studies on porous silicon (PS) and SnO₂/PS structures for light emitting devices.
M. Jayachandran, **L. C. Nehru**, VS. Vidhya and C. Sanjeeviraja
Presented in “10th International conference on Advanced materials (IUMRS-ICAM 2007)” during 8-13th October 2007 at Bangalore, INDIA.
9. Preparation of nano structured SnO₂:F by sol-gel spin coating technique.
K. C. Lalithambika, K. Shanthakumari, **L. C. Nehru**, S. Vincent, K. Thayumanavan, M. Jayachandran and C. Sanjeeviraja
Presented in “International conference on Nanomaterial & its Applications (ICNA-2007)” during 4-6th February 2007 at National Institute of Technology, Tiruchirappalli-620 015, Tamilnadu, INDIA.
10. Optoelectronic properties of nanocrystalline Indium Tin oxide films prepared by chemical spray technique.
K. C. Lalithambika, **L. C. Nehru**, J. Joseph Prince, B. Subramanian, G. Rajagopal, K. Thayumanavan, C. Sanjeeviraja, M. Jayachandran
Presented in “International conference on Nanomaterial & its Applications (ICNA-2007)” during 4-6 February 2007 at National Institute of Technology, Tiruchirappalli-620 015, Tamilnadu, INDIA.
11. Atomic force microscopic (AFM) studies of electron beam evaporated WO₃ films.
K. Shanthakumari, **L. C. Nehru**, B. Subramanian, K. Thayumanavan, M. Jayachandran and C. Sanjeeviraja

Presented in “International conference on Nanomaterial & its Applications (ICNA-2007)” during 4-6th February 2007 at National Institute of Technology, Tiruchirappalli-620 015, Tamilnadu, INDIA.

12. Nano SnO₂/Porous Silicon hetrostructure useful for sensor and solar devices.
M Jayachandran, **L. C. Nehru**, N.Sankara Subramanian, C.Sanjeeviraja, K.R.Murali, D.C.Trivedi
Presented in “Eight International conference on Nanostructured Materials (NANO – 2006)” during 20-25th August 2006 at Indian Institute of Science , Bangalore – 560 012, INDIA.
13. Combustion synthesis and luminescent properties of nanocrystalline Sr_{0.98}Al₂O₄:Ce_{0.02} power for luminescent devices.
L. C. Nehru and M. Jayachandran
Presented in “International Conference on Nano Science & Technology” during 16-18th March 2006 at India Habitat Center, New Delhi, INDIA.
14. Studies on nanocrystalline porous silicon structures formed by electrochemical etching technique.
M Jayachandran, **L. C. Nehru**, N.Sankara Subramanian, C.Sanjeeviraja, K.R.Murali, D.C.Trivedi
Presented in Indo-Singapore Symposium on “Advanced Functional Materials (AFMS-06)” during 24-26th February 2006 at IIT Bombay, Mumbai, INDIA.
15. Preparation and characterization of wide band gap Magnesium tin oxide (MgSnO₃) films for solar cells.
K. Ashok, B. Anuradha, V. Senthilkumar, **L. C. Nehru**, C. Sanjeeviraja
Presented in “International Conference on Electrochemical Power Systems (ICEPS – 2)” during 20-21th December 2004 at Hyderabad, INDIA.
16. Photoluminescence study of SrAl₄O₇: Eu²⁺ films prepared by electron beam evaporation technique.
M. Jayachandran, **L. C. Nehru**, B. Anuradha, C. Sanjeeviraja, D. C. Trivedi
Presented in “International Conference on LUMINESCENCE AND ITS APPLICATIONS (ICLA -2004)” during 9-12th February 2004 at Mumbai, INDIA.
17. Synthesis and characterization of doped strontium aluminate (SrAl₄O₇: Eu²⁺ & Dy³⁺) phosphor powders.
M. Jayachandran, **L. C. Nehru**, M. Sugantha priya, M. Paramasivam, N. Sankarasubramanian, R. Jagannathan and D. C. Trivedi
Presented in “International symposium on RECENT ADVANCES IN INORGANIC MATERIALS RAIM – 2002” during 11-13th December 2002 at Indian Institute of Technology, Mumbai, INDIA.
18. Photoluminescence studies on ZnS:xMn²⁺ nanocrystalline powders.
M. Jayachandran, **L. C. Nehru**, R. Meerabanu, M. Paramasivam, N. Sankarasubramanian, R. Jagannathan and D. C. Trivedi
Presented in “International symposium on RECENT ADVANCES IN INORGANIC MATERIALS (RAIM – 2002)” during 11-13th December 2002 at Indian Institute of Technology, Mumbai, INDIA.

7c) Papers Presented in National Symposium / Conferences

1. Physical and optical properties of tin oxide nanoparticles synthesized by sol-gel method and its sensing property.
L. C. Nehru, A. Ayesha Mariam, M. Jayachandran and C. Sanjeeviraja
Presented in “National conference on Recent Advances on Surface Engineering (NAL50: RASE 09)” during 26-27th February 2009 at National Aerospace Laboratories, Bangalore-560 017, INDIA.
2. Synthesis and studies on structure and photoluminescence of ZnSnO₃ material.
L. C. Nehru, M. Jayachandran and C. Sanjeeviraja
Presented in “Workshop on Solid State Physics to Material Science” during 19-21th August 2009 at Department of Physics, Pondicherry University, Puducherry-605 014, INDIA.
3. Physical and optical properties of tin oxide nanopowders.
L. C. Nehru, A. Ayesha Mariam, M. Jayachandran and C. Sanjeeviraja
Presented in “Nanomaterials for energy conversion and conservation” during 26th March 2009 at PG Department of Physics, Bishop Heber College, Tiruchirappalli-620 017, INDIA.
4. Preparation and Characterization of ITO Nanopowdered particle.
A. Ayesha Mariam, C. Sanjeeviraja, **L. C. Nehru**, M. Jayachandran
Presented in “Nanomaterials for energy conversion and conservation” during 26th March 2009 at PG Department of Physics, Bishop Heber College, Tiruchirappalli-620 017, INDIA.
5. Microwave-assisted combustion synthesis of nanocrystalline ZnO powder.
L. C. Nehru, M. Jayachandran and C. Sanjeeviraja
Presented in “Recent Advances in textile and Electrochemical Sciences (RATES-2009)” during 4th December 2009 at School of Chemistry, Alagappa University, Karaikudi-630 003, INDIA.
6. Thermal and optical studies on nanocrystalline tin oxide.
L. C. Nehru, M. Jayachandran and C. Sanjeeviraja
Presented in “National seminar on Nanotechnology for Energy and Environmental Applications-2009 (NTEEA-09)” during 9th April 2009 at Department of Chemistry and Centre for nanotechnology, Kalasalingam University, Virudhunagar-626 190, INDIA.
7. Physical and optical properties of tin oxide (SnO₂) nanoparticles synthesized by sol-gel method.
L. C. Nehru, A. Ayesha Mariam, M. Jayachandran and C. Sanjeeviraja
Presented in “National conference on NANO MATERIALS” during 17-18th October 2008 at Department of Physics, School of Science & Humanities, Karunya University, Coimbatore-641 114, INDIA.
8. Properties of Indium tin oxide (ITO) prepared by combustion method.
A. Ayesha Mariam, **L. C. Nehru**, M. Jayachandran and C. Sanjeeviraja
Presented in “National conference on NANO MATERIALS” during 17-18th October 2008 at Department of Physics, School of Science & Humanities, Karunya University, Coimbatore-641 114, INDIA.

9. Nano-sized tin oxide (SnO_2) powder prepared by sol-gel method.
L. C. Nehru, VS. Vidhya, B. Subramanian, M. Jayachandran, C. Sanjeeviraja
Presented in “National Conference on Nano Materials – Preparation, Characterization and Devices,” during 14th March 2008 at Bishop Heber College, Tiruchirappalli-620 017, INDIA.
10. Nano-sized tin oxide (SnO_2) powder prepared by sol-gel method.
L. C. Nehru, VS. Vidhya, B. Subramanian, M. Jayachandran, C. Sanjeeviraja
Presented in “National Conference on Nano Materials – Preparation, Characterization and Devices: during 14th March 2008 at Bishop Heber College, Tiruchirappalli-620 017, INDIA.
11. Structural properties of transparent and conducting indium tin oxide (ITO) films prepared by spin coating technique.
K. C. Lalithambika, B. Subramanian, **L. C. Nehru**, K. Thayumanavan, M. Jayachandran, C. Sanjeeviraja
Presented in “National conference on smart materials and recent technologies” during 22-23th February 2007 at Sri Venkateswara University, Tirupati-517 502, INDIA.
12. A comparative study on WO_3 films prepared by electron beam evaporation and electrodeposition.
K. Shanthakumari, B. Subramanian, **L. C. Nehru**, K. Thayumanavan, M. Jayachandran, C. Sanjeeviraja
Presented in “National conference on smart materials and recent technologies” during 22-23th February 2007 at Sri Venkateswara University, Tirupati-517 502, INDIA.
13. Preparation and characterization of spray pyrolysed MgO thin films.
A. Moses Ezhil Raj, **L. C. Nehru**, M. Jayachandran, C. Sanjeeviraja
Presented in “Third All India Conference of Scott Research Forum (SRF)” during 4th March 2006 at Scott Christian College (autonomous), Nagercoil-629 003, INDIA.
14. Substrate temperature dependent structural and optical properties of spray pyrolysed magnesium oxide thin films.
A. Moses Ezhil Raj, **L. C. Nehru**, M. Jayachandran, C. Sanjeeviraja
Presented in “National Seminar on Advances in Materials Science (NSAMS-2006)” during 27 – 28th March 2006 at Manonmaniam Sundaranar University, Tirunelveli-627 012, , INDIA.
15. Combustion Synthesis and optical properties of Nanocrystalline Mn and Ce doped SrAl_2O_4 phosphor powder.
M. Josphin @ Merina, B. Anuradha, **L. C. Nehru**, M. Jayachandran and D.C. Trivedi
Presented in “Twelfth National Convention of Electrochemists (NCE-12)” during 18-19th February 2005 at Thiagarajar College of Engineering, Tamilnadu, India.
16. Synthesis and characterization of Nanocrystalline Tin Oxide (SnO_2) powder.
M. Sabeena banu, Manjusri, **L. C. Nehru**, M. Jayachandran and D.C. Trivedi
Presented in “Twelfth National Convention of Electrochemists (NCE-12)” during 18-19th February 2005 at Thiagarajar College of Engineering, Tamilnadu, India.

17. Preparation and characterization of porous silicon.
SP. Mangalam, C. Gayathri, **L. C. Nehru**, M. Jayachandran and D.C. Trivedi
Presented in “Twelfth National Convention of Electrochemists (NCE-12)” during 18-19th February 2005 at Thiagarajar College of Engineering, Tamilnadu, India.
18. Structure and optical properties of MgSnO₃ nano particles prepared by gel-combustion method.
M. Corsica Nancy, P. Jaya Mani, **L. C. Nehru**, M. Jayachandran and D.C. Trivedi
Presented in “Twelfth National Convention of Electrochemists (NCE-12)” during 18-19th February 2005 at Thiagarajar College of Engineering, Tamilnadu, India.
19. Discuss the output parameters of solar cells.
T. Balakrishnan, P. Gershom Jebaraj, **L. C. Nehru**, M. Jayachandran and D.C. Trivedi
Presented in “Twelfth National Convention of Electrochemists (NCE-12)” during 18-19th February 2005 at Thiagarajar College of Engineering, Tamilnadu, India.
20. Synthesis and characterization of sol-gel derived nanocrystalline Tin oxide (SnO₂).
E. Carol Christy, C. Ravidhas, **L. C. Nehru**, M. Jayachandran and D. C. Trivedi
Presented in “Twelfth National Convention of Electrochemists (NCE-12)” during 18-19th February 2005 at Thiagarajar College of Engineering, Tamilnadu, India.
21. Studies on magnesium indium oxide (MgIn₂O₄) films using electron beam evaporation technique.
J. Jaya Murugan, C. Ravidhas, **L. C. Nehru**, M. Jayachandran and D. C. Trivedi
Presented in “Twelfth National Convention of Electrochemists (NCE-12)” during 18-19th February 2005 at Thiagarajar College of Engineering, Tamilnadu, India.
22. A study of long after glow Eu²⁺ and Dy³⁺ doped SrAl₄O₇ film prepared by electron beam evaporation (EBE) technique.
M. Rethna Ganesh, C. Ravidhas, **L. C. Nehru**, M. Jayachandran and D. C. Trivedi
Presented in “Twelfth National Convention of Electrochemists (NCE-12)” during 18-19th February 2005 at Thiagarajar College of Engineering, Tamilnadu, India.
23. Structural and optical studies of nanosized magnesium tin composite oxide films (MgSnO₃ and Mg₂SnO₄) prepared by pulsed laser deposition technique.
C. Ravidhas, V. Senthilkumar, M. Joseph, P. Manoravi, **L. C. Nehru**, M. Jayachandran and C. Sanjeeviraja
Presented in “Twelfth National Convention of Electrochemists (NCE-12)” during 18-19th February 2005 at Thiagarajar College of Engineering, Tamilnadu, India.
24. Studies in ZnO:Ga powder prepared by combustion synthesis method.
K. Nirmala, **L. C. Nehru**, M. Jayachandran and D.C. Trivedi
Presented in “ELEVENTH NATIONAL CONVENTION OF ELECTROCHEMISTS (NCE-11)” during 26-27th December 2003 at Bishop Heber College, Tiruchirappalli, Tamilnadu, India
25. Photoluminescence and materials properties of Eu²⁺ in ZnS:Eu nanoparticles.
M. Jayachandran, **L. C. Nehru** and D.C. Trivedi
Presented in “ELEVENTH NATIONAL CONVENTION OF ELECTROCHEMISTS (NCE-11)” during 26-27th December 2003 at Bishop Heber College, Tiruchirappalli, Tamilnadu, India.

26. A photoluminescence study of SrAl₄O₇: Eu²⁺ films for LED devices.
M. Jayachandran, **L. C. Nehru**, B. Anuradha, C. Sanjeeviraja and D. C. Trivedi
Presented in “ELEVENTH NATIONAL CONVENTION OF ELECTROCHEMISTS (NCE-11)” during 26-27th December 2003 at Bishop Heber College, Tiruchirappalli, Tamilnadu, India.
27. Studies on porous silicon structures.
M. Jayachandran, **L. C. Nehru**, C. Ravidhas and D.C. Trivedi
Presented in “ELEVENTH NATIONAL CONVENTION OF ELECTROCHEMISTS (NCE-11)” during 26-27 December 2003 at Bishop Heber College, Tiruchirappalli, Tamilnadu, India.
28. A comparative study of SrAl₄O₇: Eu²⁺ powder and films for photoluminescence devices.
M. Jayachandran, **L. C. Nehru**, B. Anuradha, C. Sanjeeviraja, R. Jagannathan and D. C. Trivedi
Presented in “National seminar on “FUTURISTIC ASPECTS OF ELECTROCHEMICAL SCIENCE & TECHNOLOGY (FAEST – 2003)” during 23-24th July 2003, CECRI, Karaikudi, Tamilnadu, India.
29. Luminescent properties of nanocrystalline SrAl₄O₇: Eu²⁺& Dy³⁺ (SAO) films for electroluminescent (EL) devices.
M. Jayachandran, **L. C. Nehru**, B. Anuradha, C. Sanjeeviraja, R. Jagannathan and D. C. Trivedi
Ninth National seminar on CRYSTAL GROWTH, 24-26 February, 2003, Anna University, Chennai, Tamilnadu, India.

7d) National International/National workshop attended

- ✓ Workshop on “**Solid State Physics to Materials Science**” during 19 to 21th August, 2009 held at the Department of Physics, Pondicherry University, Puducherry, Tamilnadu, INDIA.
- ✓ National workshop on “**Principles and Practice of the Powder X-ray Diffraction**” during May 30 to June 2nd, 2005 conducted at Central Electrochemical Research Institute Campus, Karaikudi - 630 006, INDIA.
- ✓ National workshop on “**Thin Film Preparation and Characterization Techniques for Energy Conversion (TFPCT-2004)**” during 22-26th November, 2004 conducted at Alagappa University, Karaikudi - 630 006, INDIA.

8. AWARDS AND FELLOWSHIPS:

- **Research Associate** award by the Council of Scientific and Industrial Research (CSIR), Govt. of India for a period of three years (2012 to 2015) in School of Physics, Alagappa University, Karaikudi- 630 003, Tamilnadu, INDIA.
- **Research Associate** awarded by the Department of Science and Technology (DST), Govt. of India for DST-CURIE program (from February 2011 to March 2012) in Department of Physics, Mother Teresa Women’s University, Kodaikanal- 624 101, Tamilnadu, INDIA.

- **Research Fellowships** in Sciences for Meritorious Students (RFSMS) award by the University Grants Commission (UGC), Govt. of India for a period of five years in the School of Physics, Alagappa University, Karaikudi – 630 003, Tamilnadu, INDIA.
- Received Best paper award **first prize** in Eleventh National convention of Electrochemists (NCE – 11), held at Bishop Heber College, Tiruchirappalli, Tamilnadu, India, during December 26 – 27, 2003.
- Received Best paper award **second prizes** in Twelfth National Convention of Electrochemists (NCE-12), held at Thiagarajar College of Engineering, Tamilnadu, India, during February 18-19, 2005.
- Received Best paper awards **second prizes** in Twelfth National Convention of Electrochemists (NCE-12), held at Thiagarajar College of Engineering, Tamilnadu, India, during February 18-19, 2005.
- Received Best paper award **third prizes** in Twelfth National Convention of Electrochemists (NCE-12), held at Thiagarajar College of Engineering, Tamilnadu, India, during February 18-19, 2005.

9. HONORS RECEIVED:

Reviewer to Journal of Nanoparticle Research and Superlattices and Microstructures.

10. MEMBERSHIP IN SCIENTIFIC ORGANIZATION:

Life member of Society for Advancement of Electrochemical Science and Technology (SAEST), Central Electrochemical Research Institute Campus, Karaikudi - 630 006, Tamilnadu, INDIA.

11. TECHNICAL SKILLS:

Nanotechnology and Materials, Nano Coatings, Quality Control, Sustainable Development Projects, Research.

12. COMPUTER SKILLS:

- Installing and using windows operating system, packages and drivers.
- Scientific research software packages such as Windows 7 & XP, Power Point, spreadsheet Excel, Open Access, Ms-Outlook, Internet, Adobe professional and origin data processing Word.

13. PERSONAL DETAIL:

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DECLARATION

I do hereby declare that all the statement made in this application are true and correct to the best of my knowledge and belief.

Signature: L. C. NEHRU