

## **CURRICULUM VITAE OF Dr. R. JAYAVEL**

Name : **Dr.R. JAYAVEL** DOB: **22.05.1964**  
 Désignation : PROFESSOR & DIRECTOR  
 CENTRE FOR NANOSCIENCE AND TECHNOLOGY  
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**Professional Experience:** Teaching – 25 Years; Research – 30 Years

### **Academic Positions:**

Position	Period	Institution	Nature of work
Director	1 <sup>st</sup> June.2020- Till Date	Centre for Nanoscience & Technology, Anna University	Research, Teaching & Administration
Director	3 <sup>rd</sup> June 2015- 25 <sup>th</sup> June 2018	Centre for Research, Anna University	Research, Teaching & Administration
Director	21 <sup>st</sup> Oct.2005- 2 <sup>nd</sup> June 2015	Centre for Nanoscience & Technology, Anna University	Research, Teaching & Administration
Director-in-charge	19 <sup>th</sup> Aug.2005 to 18 <sup>th</sup> Aug. 2008	Centre for International Affairs	Administration
Visiting Professor	15 <sup>th</sup> Oct.-26 <sup>th</sup> Oct.2012	University of Queensland, Australia.	Research
Visiting Professor	23 <sup>rd</sup> Aug.- 22 <sup>nd</sup> Oct. 2010	University of Goettingen, Germany.	Research
Professor	1 <sup>st</sup> Jan. 2009 – Till Date	Crystal Growth Centre Anna University.	Research & Teaching
Visiting Professor	1 <sup>st</sup> Dec.06-31 <sup>st</sup> Mar. 07	Research Inst. Of Electronics Shizuoka University, Japan	Research
Associate Professor	1 <sup>st</sup> Jan.06 -31 <sup>st</sup> Dec. 08	Crystal Growth Centre Anna University.	Research & Teaching
Assistant Professor	18 <sup>th</sup> April '02 -31 <sup>st</sup> Dec.05	Crystal Growth Centre, Anna University.	Research & Teaching
Special Researcher	15 <sup>th</sup> Aug.'01-31 <sup>st</sup> Mar.'03	National Institute for Materials Science, Japan.	Research
STA Fellow	15 <sup>th</sup> Aug.'99- 14 <sup>th</sup> Aug.'01	National Research Institute for Metals, Tsukuba, Japan.	Research
Lecturer	13 <sup>th</sup> Dec.'95- 14 <sup>th</sup> Aug.'99	Crystal Growth Centre, Anna University.	Research & Teaching

### **Education:**

Degree	Institution	Period	Branch	Class
Ph.D.	Anna University	April 1990 – Feb. 1995	Materials Science (Crystal Growth)	By Thesis
M.Phil.	Anna University	Sep.1988 – March 1990	Physics	I Class
M.Sc.	University of Madras	June 1986- April 1988	Physics	I Class
B.Sc.	University of Madras	June 1982- April 1985	Physics	I Class

### **Areas of Research:**

- Synthesis and characterization of Bulk Nanomaterials
- Nanocrystalline Thin Films for Sensor Applications
- Hybrid Nanostructures for Energy and Environmental Applications
- Development of functional Nanostructures
- Studies on the growth aspects of Laser and Nonlinear Optical Crystals

### **Other Academic Responsibilities:**

<b>Position</b>	<b>Programme</b>	<b>Duration</b>	<b>Institution</b>	<b>Responsibility</b>
Convener	International Workshop on Crystalline Materials and Applications	03-05, January 2019	Crystal Growth Centre, Anna University	Organization and Lecture
Coordinator	International Workshop on Advanced Materials and Device Technology	22 – 24, Nov., 2017	Crystal Growth Centre, Anna University	Organization and Lecture
Chairman	International Conference on Recent trends in Applied Science and Technology	8 -9 <sup>th</sup> Sep., 2017	Centre for Nanoscience and Technology, AnnaUniversity	Organization and Lecture
Convener	Fourth International Workshop on Advanced Funtional Nanomaterials	22-24, March 2017	Centre for Nanaoscience and Technology	Organization and Lecture
Convener	National Workshop and Hands on Training on Thin film solar cells	11-12, Nov. 2016	Centre for Nanoscience andTechnology	Organization
Convener	Nanommet-2016 “Recent Trends in Nanoscience and Tech.	6-7, Oct. 2016	Centre for Nanoscience and Technology	Organization and Lecture
Convener	Third International Workshop on Advanced Functional Materials	16-18, Dec.2015	Centre for Nanoscience andTechnology	Organization and Lecture
Chairman	Nanomeet-2014 Recent Trends in Nanobiotechnology	16-17, March 2014	Centre for Nanoscience and Technology	Organization and Lecture
Chairman	Nanomeet-2013 Recent Trends in NanoBiotechnology	19-20, Sep.2013	Centre for Nanoscience andTechnology	Organization and Lecture
Convener	Second International Workshop on Advanced Functional Materials	28-30, Jan. 2013	Centre for Nanoscience and Technology	Organization and Lecture
Coordinator	Nanomeet-2012	27-28, Feb. 2012	Centre for Nanoscience andTechnology	Organization and Lecture
Coordinator	Nanomeet-2011	7-8, March 2011	Centre for Nanoscience and Technology	Organization and Lecture

Convener	International Workshop on Advanced Functional Nanomaterials	21-24 <sup>th</sup> Feb. 2011	Centre for Nanoscience and Technology	Organization and Lecture
Convener	Nanomeet-2010	26-27, March 2010	Centre for Nanoscience and Technology	Organization and Lecture
Coordinator	International Workshop on Advances in Nanoscience and Tech.	28-30 <sup>th</sup> Oct. 2009	Anna University Chennai	Organization and Lecture
Convener	Nanomeet-2009 Industry Meet on Nanoscience and Technology	29 <sup>th</sup> Nov., 2008.	Anna University Chennai	Organization and Lecture
Director-in-Charge	Centre for International Affairs	19.8.05 to 18.8.2008	Anna University Chennai.	Overseas Collaboration
Coordinator	Seminar on Energy Materials & Systems	10-11, Jan., 2008	Anna University Chennai	Organization and Lecture
Coordinator	Awareness Programme on Nanoscience and Technology	19-20, September 2007	Anna University Chennai	Organization and Lecture
Chairman	Japan-India Workshop on Optronic Materials and Devices	22-23, March 2007	NIMS, Japan.	Organization and Lecture
Coordinator	International Workshop on Nano Science and Technology	23-28, January 2006.	Anna University	Organization and Lecture
Coordinator	International Workshop on Crystal Growth & Applications of Advanced Materials	9-13, January 2006.	Crystal Growth Centre Anna University	Organization and Lecture
Convener	Indo-Japan Workshop on Crystal Growth of Advanced Materials	7-10, Dec. 2004	Crystal Growth Centre Anna University	Organization and Lecture
Co-Coordinator	UGC-Refresher Course on Crystal Growth	17 <sup>th</sup> Nov.- 7 <sup>th</sup> Dec., 2004	Crystal Growth Centre Anna University	Organization and Lecture
Co-Director	International Workshop on Crystal Growth of Technologically Important Materials	24-28, Feb.2004	Crystal Growth Centre Anna University	Organization and Lecture
Coordinator	Memorandum of Understanding between Anna University and NIMS, Japan.	2002- Till Date	Anna University & NIMS, Japan.	Collaborative Research and Exchange Programme
Coordinator	Visitor's Program under Inter-University Scheme.	1995-99 & 2003-05	Crystal Growth Centre Anna University	Lectures and Demonstration

### **Other Academic Credentials.**

Number of Publications in International/National Journals:	<b>435</b>
Papers presented in International/National conference	: <b>567</b>
Invited Lectures in International/National conferences	: <b>179</b>
No. of Ph.D. research scholars Guided	: <b>41</b>
No. of scholars currently working for their Ph.D.	: <b>11</b>
No. of M.S. By Reserch scholars Guided	: <b>2</b>
No. of Post Doctoral Researchers – Completed	: <b>6</b>
No. of Post Doctoral Researchers – Ongoing	: <b>2</b>

### **International Research Recognition:**

Google Scholar- Citations:	<b>8424</b>	<i>h</i> -Index: <b>47</b>
Scopus - Citations:	<b>6770</b>	<i>h</i> -Index: <b>42</b> .
Web of Science (ID R-8016-2018) Citations-	<b>6187</b> ;	<i>h</i> -Index- <b>40</b>

### **Research Scholars completed their Ph.D. under the guidance of Dr. R. Jayavel**

Sl.No	Name of the Scholar	Title of thesis	Year
1.	Dr. G. Arunmozhi	An investigation on the nucleation, growth and characterization of semi-organic LAP and TGSP family crystals	1999
2.	Dr. S. Aravazhi	Investigation on the nucleation, growth and characterization of pure and doped triglycine sulfate crystal	1999
3.	Dr. R. Varatharajan	Investigation on the growth and characterization of pure and doped BaCaTiO <sub>3</sub> and BaSrTiO <sub>3</sub> single crystals	2000
4.	Dr. P. M. Ushasree	Studies on nucleation and growth of non linear optical ZTS family and BTCC crystals their characterization	2000
5.	Dr. N.V. Giridharan	Fabrication of barium strontium titanate, lead barium titanate and Bismuth titanate thin films by sol-gel technique and their characterization	2001
6.	Dr.R. Mohankumar	Studies on nucleation kinetics, growth and characterization of nonlinear optical and ferroelectric single crystals	2002
7.	Dr. S. Venkataraj	Investigations on the structural and optical properties of NbO <sub>x</sub> , ZrO <sub>x</sub> and ZrO <sub>1-x</sub> N <sub>x</sub> thin films prepared by reactive dc magnetron sputtering process	2002
8.	Dr. E. Srinivasan	Studies on growth and characterisation of 1222 Type high temperature superconducting single crystals and synthesis aspects of Sr <sub>2</sub> GdRuO <sub>6</sub>	2004
9.	Dr.S. Uthayakumar	Investigations on the growth aspects of Bi-2212 and Ru-1212 textured crystals and fabrication of Bi-2201 and LSMO thin films	2004
10.	Dr.S.Madeswaran	Investigations on the growth aspects and property studies of Co and Rh doped Ba(Sr)/TiO <sub>3</sub> and Pb[(Zn,Nb)Ti]O <sub>3</sub> ferroelectric single crystals	2005
11.	Dr. R. Sankar	Synthesis, Growth and Characterisation of Non-linear Optical Single crystals of organometallic Thiourea, Thiosemicarbazide and Glycine compounds.	2008
12.	Dr. D. Kalaiselvi	Growth and Characterization of Amino Acid based Nonlinear Optical Single Crystals of Organic and Semiorganic compounds.	2008
13.	Dr. D. Rajesh	Investigations on the Growth Aspects and Optical Properties of Cesium <sub>4</sub> Triborate Single Crystals for UV generation	2008
14.	Dr.S.V. Rajasekaran	Investigations on Growth and Characterisation of Pure and Nb doped 0.58Pb[Sc <sub>1/2</sub> Nb <sub>1/2</sub> ]O <sub>3</sub> -0.42PbTiO <sub>3</sub> Ferroelectric Single Crystals	2008

Sl.No	Name of the Scholar	Title of thesis	Year
15.	Dr. M.Subramanian	Investigations on pure and doped TiO <sub>2</sub> and ZnO thin films and the effect of swift heavy ion Irradiation on Mn doped ZnO Thin Films	2008
16.	Dr. A. Bhaskaran	Studies on the growth aspects and characterization of thiocyanate and thiourea based metal-organic nonlinear optical single crystals	2009
17.	Dr. C. M. Raghavan	Studies on the Growth Aspects and Characterization of Nonlinear Optical Metal-Organic Bimetallic Thiocyanate based single crystals	2009
18.	Dr. M.Ramesh Babu	Investigations on Growth and Characterisation of La-Pb-MnO single crystals and Effect of Heavy Ion Irradiation on the Physical Properties	2009
19.	Dr. S.Vijayalakshmi	Investigations on ZnO:M(M=Al,Cd),SnO <sub>2</sub> :Zn nd Zn <sub>2</sub> SnO <sub>4</sub> Thin Films Deposited By Spray Pyrolysis Method	2009
20.	Dr. G. Mohankumar	Investigations on Pure and Doped ZnO Nanostructures for Spintronics and Nano Hybrid Systems for Photovoltaic Applications	2010
21.	Dr. P. Ilanchezhiyan	Investigations on the Preparation and characterization of Pure and Rare-earth Doped ZnO Nanorods and Thin films	2011
22.	Dr. P. Anandan	Studies on the growth aspects and characterization of some amino acids based semi-organic nonlinear optical single crystals	2011
23.	Dr. Krishna Chandar	Investigations on the Synthesis and Characterisation of some rare-earth oxides Nanostructures and Mesocrystals	2012
24.	Dr. R. Pradeep Kumar	Synthesis, Characterization and the Catalytic Activity of Basic Metal Oxide Functionalized Mesoporous Carbon Materials.	2013
25.	Dr. Karl Chinnu	Studies on the Synthesis and Characterization of and CdS Nanostructures and Bilayer Films for Fuel Cell Applications	2013
26.	Dr. K. Satheesh	Thiourea Assisted Synthesis of RGO, Pure and transition Metal Ions Doped CdS/RGO Nanocomposites for Photocatalytic and Energy Applications.	2013
27.	Dr. A. Arivarasan	Synthesis and Characterization of CdTe quantum Dots and CdTe:CdS Nanocomposites for Solar Cell Applications	2014
28.	Dr. R.Dhinesh Kumar	Investigation on the Synthesis and characterization of YMnO <sub>3</sub> , TbMnO <sub>3</sub> Nanostructures and LaFeO <sub>3</sub> based Nano-composite for Photocatalytic applications	2014
29.	Dr. T. Saravanan	Synthesis and Characterization of graphene based Nano-composites for Supercapacitor and Environmental Applications	2015
30.	Dr. R. Raja	Synthesis and Characterization of Carbon based Metal-oxide nanocomposites and layered material for supercapacitor and Hydrogen generation Applications	2015
31.	Dr. M. Shanmugam	Synthesis and Characterization of Graphene-Metal Oxide Nanocomposites for Photocatalytic Applications	2016
32.	Dr.N.Venkatachalam	Investigation on the Synthesis and Characterization of binary transition metal oxide electrodes for supercapacitor applications.	2017
33.	Dr. D. Selvakumar	Synthesis and Fabrication of Reduced Graphene Oxide Based Thin Film Composites for Energy and Electronic Applications.	2017

Sl.No	Name of the Scholar	Title of thesis	Year
34.	Dr. M. Geetha	Tribological and Mechanical properties of Metal and Ceramic Doped Dimond-like Carbon Thin films Prepared by Magnetron Sputtering	2017
35.	Dr. P. Pughazhendhi	Synthesis of Silver and Gold nanoparticles for Non-linear optical and Antibacterial Applications	2017
36.	Dr. K. RamKumar	Development of nanoformulations for leathers with multifunctional performance properties	2018
37.	Dr. C. Sengottaiyan	Reduced Graphene Oxide Based Metal Oxide and Sulphide Nanocomposites for supercapacitor Applications	2018
38.	Dr. P. Nagaraju	Investigation on Supercapacitive Characteristics of Metal Oixde/Graphene Nanocomposites for Energy Storage Applications	2018
39.	Dr. H. Sivaram	Reduced Graphene Oxide Based Metal Oxide Nanocomposites for Supercapacitor Applications.	2019
40.	Dr. M. Arun Kumar	Fabrication and Characterization of Graphene Field Effect Transistor for Biosensor Applications	2019
41.	Dr. G. Dharunya	Biodegradable Metal Nanomaterial Based Bio-Inspired Materials for Tissue Engineering Applications	2019

### **Membership in Professional bodies:**

1. Indian Association for Crystal Growth
2. Indian Science Congress Association
3. Electron Microscope Society of India
4. Materials Research Society of India
5. Indian Physics Association.
6. Indian Physical Society

### **Industry Collaboration:**

1. The Development of Silver and gold Nano paste for high reliability Electronic applications, VB Ceramic Consultants, Chennai.
2. Colour Stability in doped sapphire crystals for Synthetic Gem Applications. Industry: Indo-Swiss Synthetic Gem Manufacturing Co Ltd., Mettupalayam.

### **Membership in Academic bodies:**

1. Member – Research Advisory Committee Anna University, Chennai. (2015-2019)
2. Member - Board of Studies, Faculty of Technology, Anna University, Chennai.
3. Member – Academic Council, Anna University (2015-2018)
4. Member - Board of Studies in Nanoscience, Bharathiar University, Coimbatore.
5. Member - Board of Studies in Nanoscience and Technology, Alagappa University.
6. Member - Board of Studies in Biosensors and Bioelectronics, Alagappa University.
7. Member - Board of Studies in Physics, Periyar University, Salem
8. Member - Board of Research Studies, Periyar University, Salem.
9. Member - Board of Studies in Nanoscience, M.S. University, Tirunelveli.
10. Member - Board of Studies, Sri Ramachandra University, Chennai.
11. Member - Board of Studies, Karunya University, Coimbatore.

12. Member- Board of Studies, Autonomous Colleges Affiliated to Anna University.
13. Member-Governing Council, Autonomous Colleges Affiliated to Anna University.
14. Member-Governing Council, School of Nano Technology, Pondichery University.
15. Member-Board of Management, VELS Institute of Science Technology & Advanced Studies (VISTAS)
16. Member-University Research Board, Kalasalingam Academy of Research and Education, Krishnankoil.
17. Member, Board of Academic Research, VIT, Vellore
18. Member-UNESCO Chair in Materials for Energy Conversion, Saving and Storage.

### **Awards & Recognition:**

- Fellow of Academy of Sciences, Chennai (Since 1997).
- MRSI Medal-2019 by the Materials Research Society of India.
- Research Excellence Award-2019, Anna University
- Life Time Achievement Award-2019 by Indian Spectrophysics Association (ISPA)
- LEAP (Leadership for Academicians Programme) Fellowship-2019-MHRD, Govt. of India.
- Highly Cited Author-2018 - Royal Society of Chemistry, UK.
- Tamil Nadu Scientist Award (TANSA)-2016
- Visiting Professor, University of South Australia, Adelaide (June 2016)
- MRSI Prize for Best Paper Presentation in the MRSI-Meeting-2013
- Visiting Professor, University of Queensland, Australia (Oct.2012)
- Active Researcher Award, Anna University-2012.
- Media Guild Award of Recognition-2012.
- Visiting Researcher, National Institute for Materials Science, Japan (June –2010)
- Visiting Professor, University of Goettingen, Germany under the European Union Academic Exchange Programme (Aug.-Oct.2010).
- Visiting Researcher, National Institute for Materials Science, Japan(Sep.-2009)
- Honorary Guest Professor, Shizuoka University, Japan(2009-2012).
- Visiting Professor, Shizuoka University, Japan (December 2006-March2007).
- Visiting Researcher, National Institute for Materials Science, Japan(June-2005)
- Best paper Award, “International Conference on Spectrophysics”, Chennai(2005).
- Japanese Government Award for Foreign Expert (May-June2004)
- Special Researcher, National Institute for Materials Science, Japan(2001-2003)
- DAAD Sandwich Model Fellowship to visit Germany(2000)
- Science & Technology Agency (STA) Fellowship, Japan(1999-2001)
- Best paper Award, “Seminar on Materials and Characterization”, CECRI(1998)
- Certificate of Achievement by Leica Cambridge Ltd, UK for SEM Training (1995)
- Selected for Young Physicists Colloquium by the Indian Physical Society(1993)
- CSIR-Visiting Research Associate for research at NPL, New Delhi(1993).

### **Sponsored Research Projects Completed:**

Sl. No	Title of the project	Position	Funding Agency	Duration	Grant (Lakh)
10	M.Tech. Programme on Nanoscience and Technology	Principal Investigator	DST	2008-2014	450.00

### **Ongoing Sponsored Research Projects**

Sl. No	Title of the project	Position	Funding Agency	Duration	Grant (Lakh)
1.	M.Tech. Programme on Nanoscience and Technology	Principal Investigator	DST	2015-2020	462.00
2.	Development of highly stable platinum free nanostructures for dye sensitized solar cell Applications	Principal Investigator	SERB	2017-2020	42.31
3.	Development of NiCo <sub>2</sub> O <sub>4</sub> decorated MoS <sub>2</sub> and rGO nanocomposites based flexible solid state supercapacitor for energy storage applications	Principal Investigator	MHRD-STARS	2019-2022	49.00

### **Consultancy Scheme-Completed**

Sl. No	Title of the project	Position	Funding Agency	Duration	Grant (Lakh)
1.	The Development of Silver and gold Nano paste for high reliability Electronic applications,	Principal Investigator	VB Ceramic Consultants ,Chennai.	2018-2019	5.60

### **Overseas Visit:**

Country	Period	Place and purpose of visit
U.K.	May 1995	SEM training at Cambridge and visit to Cambridge University and Birmingham University.
U.S.A.	Dec.1995	MRS Meeting at Boston and visit to Pennsylvania State University and Argonne National Laboratory, Illinois.
JAPAN	July 1998	10 <sup>th</sup> International workshop on superconductivity at Okinawa and visit to several laboratories/Institutions.
JAPAN	Aug.1999-Mar.-2003	Research at National Institute for Materials Science, Tsukuba Science City, Ibaraki.
GERMANY	May 2000	Visit to RWTH, Aachen and Institute for Crystal Growth, Berlin under DAAD-Sandwich Model Fellowship
U.S.A.	March 2001	American Physical Society meeting at Seattle and visit to Argonne National Laboratory, Illinois.
FRANCE	June 2002	European Materials Research Society (E-MRS)-Spring Meeting, Strasbourg.
S. KOREA	Aug. 2002	Second Asian Conference on Crystal Growth and Crystal Technology (CGCT-2), Hanyang University, Seoul.



<b>Country</b>	<b>Period</b>	<b>Place and purpose of visit</b>
JAPAN	May 2004	Exchange visits under the MoU between National Institute for Materials Science (NIMS) and Anna University.
JAPAN	June 2005	Exchange visits under the MoU between National Institute for Materials Science (NIMS) and Anna University.
SINGAPORE	September 2005	Visit to Nanyang Technological University and National University of Singapore for Research Discussion.
CHINA	October 2005	Third Asian Conference on Crystal Growth and Crystal Technology, Beijing.
AUSTRALIA	April 2006	Visit to The University of Western Australia and University of Adelaide to establish collaborative research programmes.
CHINA	May 2006	Visit to Nanjing University and Wuhan University for signing MoU for research collaboration.
JAPAN	September 2006	International Student Seminar on Materials and Prospects for Nanotechnology, Nagoya Institute of Technology.
NORWAY	November 2006	Visit to Norwegian Geotechnical Institute and NANSEN Environmental and Remote Sensing Centre for signing MoU for research collaboration
HOLLAND	November 2006	Visit to University of Amsterdam for signing MoU for research collaboration
GERMANY	November 2006	Visit to University of Luneburg for signing MoU for research collaboration
ITALY	November 2006	Visit to Politecnico di Torino, University of Torino and University of Pisa for signing MoU for research collaboration
JAPAN	December 2006 to March 2007	Visiting Professor at Shizuoka University, Hamamatsu and to Organize the Japan-India Workshop at National Institute for Materials Science, Tsukuba.
U.S.A.	23 <sup>rd</sup> Sep.- 4 <sup>th</sup> Oct. 07	Visit to various Universities and Institutions for establishing collaborative research programs.
S. KOREA	8 <sup>th</sup> -15 <sup>th</sup> Oct. 2007	Visit to various Universities/Institutions to establish collaborative research.
JAPAN	22 <sup>nd</sup> Sep. - 2 <sup>nd</sup> Oct. 2009	Visit to National Institute for Materials Science, Tsukuba for collaborative research.
JAPAN	21 <sup>st</sup> June-2 <sup>nd</sup> July 2010.	Visit to National Institute for Materials Science, Tsukuba for collaborative research.
GERMANY	23 Sep.- 22 Oct. 2010	Visiting Professor at the University of Goettingen under the European Union Academic Exchange Programme.
SWEDEN	25-28 <sup>th</sup> Sep. 2010	Visit to Royal Institute of Technology, Stockholm for collaborative research.
U.S.A.	13-17 <sup>th</sup> Oct. 2010	Visit to New Jersey Institute of Technology and Steven's Institute of Technology for research collaboration.
JAPAN	2-12 <sup>th</sup> Dec. 2010	Visit to National Institute for Materials Science, Tsukuba for collaborative research.
AUSTRALIA	15-26 <sup>th</sup> Oct. 2012	Visiting Professor at the Australian Institute of Bio-Engineering and Nanotechnology, University of Queensland.
CHINA	9-14, Dec. 2012	Visit to Changchun Institute of Applied Chemistry to attend the 3 <sup>rd</sup> International Symposium on Advanced Materials.
U.A.E.	10-12, April 2013	Senate Meeting at the Middle East University, RAK, U.A.E.

Country	Period	Place and purpose of visit
KENYA	16-19, July 2013.	University of Nairobi and industry visit to develop rainbow roses using nano injection technology
JAPAN	25 <sup>th</sup> Nov.-6 <sup>th</sup> Dec.13	Guest Researcher at the National Institute of Materials Science, Tsukuba.
JAPAN	17-20, Feb.2014	Inter-Academia Asia Conference on Academic Cooperation organized by the Shizuoka University, Japan.
SOUTH KOREA	27 <sup>th</sup> March.-5 <sup>th</sup> April 2014	5 <sup>th</sup> International Workshop on New and Renewable Energy organized by the Kyungpook National University, Daegu.
SAUDI ARABIA	15-19, Nov. 2014	Visiting Professor at King Saud University, Riyadh.
JAPAN	1-31, Dec.2014	Exchange Researcher at the Shizuoka University under the Asia-Bridge Academic Exchange Programme
AUSTRALIA	15-30, June 2016	International Conference on Emerging Materials for Energy Storage applications at University of South Australia.
CHINA	16-19, August 2016.	4 <sup>th</sup> International Symposium on Utilization of Rare earth Resources & 7 <sup>th</sup> International Symposium on Functional Materials, Changchun Institute of Applied Chemistry.
NEW ZEALAND	30 <sup>th</sup> . Oct.-4 <sup>th</sup> Nov.2016	20 <sup>th</sup> International Conference on Ion Beam modification of Materials, Geosciences Centre, Wellington, New Zealand.
GREECE	2-4, May 2017	Workshop On Quality Assurance in Higher Education in South Asia
SINGAPORE	18-23, June 2017	9 <sup>th</sup> International Conference on Materials for Advanced Technology ( ICMAT)
ITALY	15-17 Jan., 2018	Workshop on Quality Assurance in Higher Education in South Asia
U.S.A	13-16 May 2018	World Innovation Conference on Nanotechnology, California
BELGIUM	17-19, Aug. 2018	8 <sup>th</sup> International Conference on Advanced Functional Materials and Devices at KU, Leuven.
SWEDEN	20-24, Aug. 2018	European Advanced Materials Congress and visit to Royal Institute of Technology, Stockholm.
AUSTRALIA	22 Oct.,-2 <sup>nd</sup> Nov.2018	International Conference on Emerging Advanced Nanomaterials and visit to Global Innovation Centre, New Castle University
HOLLAND	4-26 <sup>th</sup> April 2019	8 <sup>th</sup> International Conference on Nanotechnology and Materials Science.
U.K.	3-14 <sup>th</sup> June 2019	LEAP training at University of Cambridge and visit to Oxford University, Aston University and The Open University
SINGAPORE	23-28, June 2019	10 <sup>th</sup> International Conference on Materials for Advanced Technology ( ICMAT)
JAPAN	17-24, August 2019	Collaborative Research at Institute for Materials Research, Tohoku University, Sendai.
TAIWAN	22 Nov. -4 <sup>th</sup> Dec. 2019	Collaborative Research at National Taiwan University and Academia Sinica, Taipei.

### **Books/Proceedings Authored**

Advanced Materials for Optoelectronics-(2005)-Eds. **R. Jayavel & K. Kitamura** *Proceedings of Indo-Japan Workshop on Crystal Growth and Applications of Advanced Materials for Optoelectronics*, Vijay Nichole In prints, P.Ltd. Chennai.

## Patents

1. “A Process for the Production of water based nanocoolant using single walled carbon nanotubes functionalized with C1-site aminated D-glucose” Indian Patent Filed (2008) Patent Appln.no:2831/CHE/2008 dated 18.11.2008.

## LIST OF PUBLICATIONS IN INTERNATIONAL/NATIONAL JOURNALS:

1. P.S. Kumar, **R. Jayavel**, P. Murugakoothan, C.R.V. Rao, C. Subramanian and P. Ramasamy, ‘Growth of YBCO and NBCO single crystals’, (1990), Modern Phys. Lett. B, Vol. 4,1289.
2. **R. Jayavel**, P. Murugakoothan, C.R.V. Rao, C. Subramanian, P. Ramasamy, B.V. Kumarasamy and A.V. Narlikar, ‘Superconductivity and morphology studies of  $\text{Bi}_2\text{Sr}_2\text{Ca}_1\text{Cu}_2\text{O}_8$  single crystals grown from stoichiometric and nonstoichiometric melts’, (1991), Bull. Mater. Sci., Vol. 14,1343.
3. **R. Jayavel**, P. Murugakoothan, C.R.V. Rao, P.S. Kumar, C. Subramanian and P. Ramasamy, ‘Growth and morphology studies on  $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$  single crystals’, (1991), Mater. Res. Bull., Vol. 26,945.
4. **R. Jayavel**, P. Murugakoothan, C.R.V. Rao, C. Subramanian, P. Ramasamy, A. Chakravarti, R. Ranganathan and A.K. Roy Chaudhuri, ‘Preparation and characterisation of  $\text{BiSrCaCuO}$  through glassy route’, (1991), Solid State Commun., Vol. 79,421.
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