

CURRICULUM VITAE



- Name of Supervisor** : Dr. Roy Johnson
- Designation** : Scientist-G and Associate Director, ARCI
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- Academic Qualifications** : Doctor of Philosophy, Ph. D
- Professional Experience** : 26 years of research experience after obtaining Ph.D.
- Research Interests** : Ceramic processing, Transparent Ceramics, Cellular Ceramics, Chemical Vapour Deposition, Hot Isostatic Pressing, 3D Printing and Thermal Analysis
- Research Publications/Patents:** 103 (Annexure I)
- Invited talks / Inaugural address/ Foundation day lectures:** 46
- Number of Ph.D/M.Tech/ students Guided** : 22 (Annexure II)
- Honors / Awards** : Annexure III
- Membership of Professional Bodies** : Annexure IV
- Peer Recognition** : Annexure V

List of publications

1. 3D Extrusion Printing of Magnesium Aluminate Spinel Ceramic Parts Using Thermally Induced Gelation of Methyl Cellulose, *Journal of Alloys and Compounds* 770 (2019) 419-423
2. Fabrication of MgAl₂O₄ Spinel Scaffolds and Sonochemical Synthesis and Deposition of Hydroxyapatite Nanorods, *Journal of the American Ceramic Society* 99 (2016) 1544–1549
3. 3D printing of complex shaped alumina parts, *Ceramics International* 44 (2018) 19278-19281
4. Flash-sintering of Magnesium Aluminate Spinel (MgAl₂O₄) Ceramics, *Journal of the American Ceramic Society* 100 (2017) 554-562
5. Thermal degradation of ceramic slurry-coated polyurethane foam used in making reticulated porous SiC ceramics, *Journal of Thermal Analysis and Calorimetry* (<https://doi.org/10.1007/s10973-017-6863-6>)
6. Effect of Room and High Temperature Compaction on Optical and Mechanical Properties of HIPed Transparent Spinel Ceramics, *Advance Engineering Materials* 19 (2017) 1700111-1 – 1700111-7
7. Fabrication of graphite contamination free polycrystalline transparent MgAl₂O₄ spinel by spark plasma sintering using platinum foil, *Ceramics International* 42 (2016) 17920–17923

8. Comparative evaluation of electrical conductivity of hydroxyapatite ceramics densified through ramp and hold, spark plasma and post sinter Hot Isostatic Pressing routes, *Materials Science and Engineering C* 70 (2017) 364–370
9. Effect of Room and High Temperature Compaction on Optical and Mechanical Properties of HIPed Transparent Spinel ceramics, *Advanced Engineering Materials* DOI:10.1002/adem.20170011
10. Development of Cordierite based Reticulated Foams with Improved Mechanical Properties for Porous Burner Applications, *Transactions of Indian Ceramic Society* (Accepted).
11. Quasi-static compression behavior of nickel oxide, nickel oxide: zirconia, nickel:zirconia and nickel foams, *Ceramics International* 42 (2016) 10572–10578
12. Preparation and comparative evolution of mechanical behavior of Fe and Fe₂O₃ foams and their polymer composites, *Journal of Alloys and Compounds*, 750 (2018) 71-76
13. Compaction curves: A tool for qualitative evaluation of quasi-static compaction behaviour of ceramic powder, *Journal of The Australian Ceramic Society*, 51[2] 130-136 (2015)
14. Fabrication of Transparent Spinel Honeycomb Structures by Methyl Cellulose based Thermal Gelation Processing, *Journal of American Ceramic Society*, 96 [10] 3042-3045 (2013)
15. Colloidal Shaping of Alumina Ceramics by Thermally Induced Gelation of Methyl Cellulose, *Journal of American Ceramic Society*, 94 [3] 749-753 (2011)
16. Processing of Aluminium Oxynitride Through Aqueous Colloidal Forming Techniques, *Journal of American Ceramic Society*, 93 [2] 429-435 (2010).

17. Formation and densification behaviour of MgAl_2O_4 spinel: the influence of CaO and moisture in the precursors, **Journal of the American Ceramic Society**, **88**, 2752-2761(2005).
18. Prediction and validation of buckling stress (σ_{crt}) of the ceramic honeycomb cell walls under quasi-static compression, **Cogent Engineering** 3 (2016) 1168068 1-7
19. Optical and mechanical properties of compaction and slip cast processed transparent polycrystalline spinel ceramics, **Ceramics International** **40**, 5575-5581 (2014).
20. Extrusion processing of Dense MgAl_2O_4 Spinel Honeycombs with Low Relative Density, **Ceramic International**, **39**, 9819-9821 (2013).
21. Transparent Sub-micrometer Alumina from Lanthanum Oxide Doped Common Grade Alumina Powder, **Ceramic International (in press)** (2013).
22. Effect of Sphalerite to Wurtzite Crystallographic Transformation on Microstructure, Optical and Mechanical Properties of Zinc Sulphide Ceramics, **Ceramic International** (2011)
23. Diametral Deformation Behaviour and Machinability of Methyl Cellulose Thermal Gel cast Processed Alumina Ceramics, **Ceramic International**, **38**, 6115-6121 (2012).
24. Studies on Ionic Conductivity of stabilized zirconia ceramics (8YSZ) densified through conventional and non-conventional sintering methodologies, **Journal of Ceramics International**, **37** [8] 3557-3564 (2011)
25. Hydrolysis control of alumina and AlN mixture for aqueous colloidal processing of aluminium oxynitride, **Ceramic International**, **37**, 583-2590 (2011)

26. Eutectoid decomposition of aluminum titanate (Al_2TiO_5) ceramics under spark plasma (SPS) and conventional (CRH) thermal treatments, **Ceramic International**, **40**, 659-666 (2014).
27. Studies on sintering kinetics and correlation with the sinterability of 8Y zirconia ceramics based on the dilatometric shrinkage curves, **Ceramics International**, **39**, 4985–4990 (2013).
28. Microwave assisted combustion synthesis of nanocrystalline MgAl_2O_4 spinel powders, **Ceramic International**, **31**, 67-74, (2005).
29. An efficient MgAl_2O_4 spinel additive for improved slag erosion and penetration resistance of high- Al_2O_3 and MgO-C refractories, **Ceramics International**, **28** (3) 245-253(2002)
30. A new sintering aid for magnesium aluminate spinel, **Ceramics International**, **27** (7) 773-779(2001)
31. Microwave assisted solid-state reaction synthesis of MgAl_2O_4 spinel powders, **Journal of European Ceramic Society**, **24** [2] 201-207(2004)
32. Effect of Nano Grain Size on the Ionic Conductivity of Spark Plasma Sintered 8YSZ Electrolyte, **International Journal of Hydrogen Energy**, **37**, 511-517 (2012)
33. Synthesis and evaluation of Thermal, electrical and electrochemical properties of $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{Co}_{0.04}\text{Zn}_{0.16}\text{Fe}_{0.8}\text{O}_{3-\delta}$ as a novel Cathode material for IT-SOFC applications, **International Journal of Ionics**, DOI 10.1007/s11581-012-0692-1 (2012)
34. The effect of strontium doping on densification and electrical properties of $\text{Ce}_{0.8}\text{Gd}_{0.2}\text{O}_{2-\square}$ electrolyte for IT-SOFC application, **International Journal of Ionics**, **18** [3] 291-297 (2012)
35. Effect of Strontium doping on Densification and Electrical properties of $\text{Ce}_{0.8}\text{Gd}_{0.2}\text{O}_{\square 2}$ -electrolyte for IT-SOFC application, **Ionics**, (2011)

36. Structural and electrical properties of co-doped zirconia electrolyte for intermediate temperature solid oxide fuel cell application, *International Journal of Energy Research*, DOI:10.1002/er.1943 (2011)
37. Processing of Alumina Honeycomb Catalyst Substrates and Studies on Methyl Cellulose Binder Burn out Kinetics, *Journal of Advanced Catalysis Science and Technology. 1 [2]* 38-43 (2015)
38. Sonochemical Synthesis of Nano-Structured Hydroxyapatite with unique morphologies and Evaluation of Sintering Kinetics, *J. Advances in Chemistry, 11*, 3789-3977 (2015)
39. Effect of surface passivation in spinel slurry towards hydrolysis: Neutron scattering and rheological studies, *Journal of Dispersion and Technology*, DOI: 10.1080/01932691.2013.850718 (2013)
40. Transparent magnesium aluminate spinel: A prospective biomaterials for esthetic orthodontic brackets, *Journal of Materials Science: Materials in Medicine*, DOI: 10.1007/s10856-014-5268-3
41. Solid state reactions of cordierite precursor oxides and effect of substitution of CaO on the thermal expansion behaviour of cordierite honeycomb structures, *Journal of Materials Science, 38*, 2953-2961(2003)
42. Effect of rubber encapsulation on the comparative mechanical behavior of ceramic honeycombs with foams, *Materials Science and Engineering A347* 109-122(2003).
43. Effect of Post CVD Thermal Treatments on Crystallographic Orientation, Microstructure, mechanical and optical properties of ZnS ceramics, *Journal of Alloys and compounds, 496 [1-2]* 273-277 (2010)

44. Synthesis, Extrusion Processing and Ionic Conductivity Measurements of Sodium β -Alumina Tubes, *Processing and Application of Ceramics* 9 [3] 131-138, (2015)
45. Effect of Primary Particle Size on spray formation, morphology and internal structure of alumina granules and elucidation of flowability and compaction behavior, *Processing and Application of Ceramics* 8 [2] 93-99 (2014)
46. Mixing Torque Measurement : An effective tool for identifying the Critical Binder Volume Concentration for Ceramic Processing, *JSIR*, 75, 504-507 (2015)
47. Thermal conductivity in yttria dispersed copper, *Materials and Design*, 65, 869-877 (2015)
48. Effect of fuel concentration on physico-chemical properties of combustion synthesized magnesium aluminate spinel powders *Transaction of Indian Ceramic Society* 73[4] 303-306 (2014)
49. Fracture Behaviour of Chemical Vapour Deposited and Hot Isostatically Pressed Zinc Sulphide Ceramics, *Material Science and Engineering A* 528, 5030-5035 (2011)
50. Flow properties of spray dried alumina granules using powder flow analysis technique, *Advanced Powder Technology*, 24, 667-673 (2013).
51. Mineral oxide doped aluminum titanate ceramics with improved thermo-mechanical properties, *Journal of Ceramics*, 214794, 1-9 (2013)
52. Transparent Polycrystalline Ceramics: An Overview, *Transaction of Indian Ceramic Society*, 71 [2] 73-85 (2012).
53. Low Temperature In-situ Reaction Sintering of Zircon: Alumina Composites Trough Spark Plasma Sintering, *Science of Sintering*, 44, 323-330 (2012).

54. Comparative Evaluation of Spark Plasma (SPS), Microwave (MWS), Two Stage (TSS) and conventional Sintering on the densification and micro-structural evolution of 8 YSZ zirconia ceramics, *Science of Sintering*, **42**, 259-267 (2010)
55. Micro structural control of stabilized zirconia ceramics (8YSZ) through modified conventional sintering methodologies, *Science of Sintering*, **42**, 91-97 (2010)
56. Beta alumina coated ceramic Fluoride removal from ground water by honeycomb, *Water Practice and Technology*, DOI: 10.2166/WPT. 2010. 061, (2011)
57. Rheological studies on aqueous alumina extrusion mixes, *Transactions of the Indian Institute of Metals*, DOI: 10.1007/s12666-011-0096-3 (2011).
58. Effect of relative density on the compressive flow behaviour of cordierite and cordierite: Mullite honeycombs, *Transactions Indian Institute of Metals*, **63** [4], (2010)
59. Pressure slip casting: A novel process for producing alumina bodies with superior green density, *Interceram*, **3** (2013).
60. Comparative nanoparticle size characterization of EEW Alumina using various measurements techniques, *Particulate science and Technology*, **30** [6] 517-532 (2012).
61. Comparative evaluation of thermal conductivity of zirconia solid and honeycomb structures, *Experimental heat transfer*, **25** [4] 267-281 (2012).
62. Effect of micro-cracking on the thermal conductivity and thermal expansion of titanate (Al_2TiO_5) ceramics, *Journal of Processing and Application of ceramics*, **7** [3] 143-146 (2013).

63. Pressure slip casting and cold isostatic pressing of aluminum titanate green ceramics: A comparative evaluation, *Journal of Processing and Application of ceramics*, 7 [4] 159-166 (2013).
64. Colloidal Shaping of 8 mol% Yttria Stabilized Zirconia Electrolyte Honeycomb Structures by Microwave Assisted Thermal Gelation of Methyl Cellulose, *International Journal of Applied Ceramic Technology*, (2012) 1-10 (DOI:10.1111/j.1744-7402.2012.02852.x).
65. High temperature flexural strength and thermal stability of near zero expanding doped aluminum titanate ceramics for DPF Applications, *International Journal of Applied Ceramic technology*, DOI: 10.1111/ijac.12092, 1-10 (2013).
66. Thermally Induced Gelation of Alumina Shaping- Neutron Scattering and Rheological Measurements, *Open Journal of Inorganic Chemistry*, 3, 48-54 (2013).
67. Experimental investigation on flowability and compaction behavior of spray granulated submicron alumina granules, *ISRN Ceramics*, 264194, 1-6 (2013).
68. Hot Isostatic Pressing of ZnS Powder and CVD Zinc Sulphide Ceramics and Comparative Evaluation of Physico-chemical, Microstructural and Transmission Properties, *Transaction of Indian Ceramic Society, Transactions - Indian Ceramic Society*, 71 [2] 73-85 (2012)
69. Microwave induced combustion synthesis of nanocrystalline TiO₂-SiO₂ binary oxide, *Journal of Materials Research*, 19, 1015-1023(2004)
70. Studies on energy absorption characteristics of cordierite-mullite honeycombs, *Journal of Advanced Materials*, 35 [3] 3-8 (2003).
71. Effect of preparation method on sinterability and properties of nanocrystalline MgAl₂O₄ and ZrO₂-MgAl₂O₄ materials, *British Ceramic Transactions*, 102 [3] 119-128(2003).

72. Glimpses of ceramics – ARCI's perspectives, **Proceedings of US-Japan Workshop (2002) on "Low cost production of ceramics and related materials"**, Osaka, Japan, pp. 49– 57, (2002)
73. Thermal anisotropy in sintered cordierite monoliths, *Materials Chemistry and Physics*, 67 [1-3] 140-145 (2001).
74. Ceramic based catalytic converter for diesel vehicles, *Transactions of the Indian Ceramic Society*, 59 [3] 93-95(2000)
75. Rate Controlled Sintering: A unique Concept for Micro-structural Control, **Trans. Ind. Ceram. Soc**, 66, (4) 157 -166 (2007)
76. Catalytic Oxidation of Carbon monoxide and hydrocarbons on supported Zinc ferrite, *J. of IPHE*, 1, 1-7, (1990).
77. Atomic Absorption spectrophotometric determination of trace Metals in Suspended Particulate Matter, *Journal of Environmental Protection*, 10, 614 – 618(1990)
78. Synthesis, extrusion processing and ionic conductivity measurements of sodium β -alumina tubes, *Processing and Application of Ceramics* 9 [3] (2015) 131–138, DOI: 10.2298/PAC1503131A
79. Kaoline - based cordierite for pollution control, *Journal of European Ceramic Society*, 24, 65-73 (2004).
80. Mechanical Behavior of Alumina based Reticulated Foams Encapsulated and Infiltrated with Polymer under Quasistatic and Dynamic Conditions, *Transactions of Indian Ceramic Society* 77 (2018) 1-4

81. Processing and properties of sintered submicron IR transparent alumina derived through sol-gel method. R Senthil Kumar, Asit Kumar Khanra and Roy Johnson, *Journal of Sol-gel Science and Technology*,86 (2018) 374-372
82. Oxidation Resistant TiO₂-SiO₂ Coatings on Mild Steel by Sol-Gel, *Journal of Sol-Gel Science and Technology*(under review)
83. 3D Printing of Cordierite Honeycomb Structures and Evaluation of Compressive Strength under Quasi-static Condition, *International Journal of Applied Ceramic Technology* (under Review)
84. Comparative Evaluation on Compaction and Sintering Behavior of Spray and Freeze Granulated MgAl₂O₄ Spinel Granules, *Journal of Alloys and Compounds* (under review)
85. 3D Printing of Alumina Paste: Investigations on Paste Rheology and Printing Parameters, *Processing and Application of Ceramics* (under review)
86. Fabrication of complex shaped ceramic articles from 3D printed polylactic acid templates by replication process, *Ceramic International*, Manuscript Number: CERI-D-19-04877 (accepted)

List of Books / Book Chapters

87. Hidden ceramics in Energy and Transport Sectors- Current Status and Road Map for the Future, Proceedings of the 1st International Congress on Ceramics, Toronto Canada, June 2006. Eds S. Freiman, **The American Ceramic Society, p 553-594 (2007).**
88. Cellular Solids: Unique Engineering Solids, ***Material Research: Current Scenario and Future Projections, Material Research Society of India (2002), India***
89. Redox Catalysts in Air Pollution Control: ***Authors: Roy Johnson and A.N. Garg, Lambert Academic Publishing, ISBN 978-3-8465-8064-6, 2012***

90. Processing of Infrared Transparent Magnesium Aluminate Spinel: An Overview, *Handbook of Advanced Ceramic and Composite*, Publisher- Springer (in press)
91. Transparent Materials for Ballistic Armour Applications, *Handbook of Advanced Ceramic and Composite*, Publisher- Springer (accepted)
92. Zinc Sulphide Ceramics for Infrared Optics, *Handbook of Advanced Ceramic and Composite*, Publisher- Springer (accepted)
93. Handbook of Advanced Ceramic and Composite, *Edited by Roy Johnson and Y.R. Mahajan* Publisher- Springer (in press)

List of Patents

94. A Process of preparation of zinc sulphide free standing article by chemical vapour deposition, R. Senthil Kumar, P. Ramavath, P. Biswas, U. S. Hareesh and **R. Johnson. (Indian patent IN2009005-11)**
95. An Ecofriendly Incinerator to Dispose of the Sanitary Napkins and Bio Medical Waste” Appl. No. 201821021430 Dt 07.06.2018, VV S Rao, Y Srinivasa Rao, **Roy Johnson**, G Padmanabham, Gupta Ankit, Labhasetwar Nitin Kumar, Kumar Rakesh **(Indian patent)**
96. Ceramic Honeycomb Based Energy Efficient Air Heater, V.V.S. Rao, **Roy Johnson**, B.P.Saha and Y.R. Mahajan, **(Indian Patent. No. 2007787 Dated 07-01-99)**
97. New Composite Material (Ceramic Honeycomb based) having good Shock Attenuating Properties, **Roy Johnson**, B.P.Saha and Y.R. Mahajan **(Indian Patent. No. 194524 Dated 06-05-98)**

98. An improved process for the production of dense magnesium aluminate spinel grains, I.Ganesh, Subir Bhattacharjee, B.P. Saha, **Roy Johnson**, and Y.R. Mahajan (**Indian Patent. No. 200272 Dated 07-01-99**)
99. Improved process for the preparation of magnesium aluminate spinel grain, M.C.S. Rao, Y.R. Mahajan, S. Bhattacharjee, **Roy Johnson**, B.P. Saha, and I Ganesh, (**Indian Patent. No. 198208 Dated 06-07-2000**)
100. An improved method for making honeycomb extrusion die and a process for producing Ceramic honeycomb structures using the die Iouri Fomichev, I.Ganesh, B.P. Saha **Roy Johnson**, N. Thiyagarajan, Y.R. Mahajan, and V. Mahender. (**Indian Patent. No. 198045, Dated: 3 -07-01**)
101. An improved process for preparing ceramic crucibles having high thermal shock resistance and high slag penetration resistance useful for carbon and sulfur analysis of ferrous alloys and steel samples and the ceramic crucibles so prepared, B.P. Saha, Y.R. Mahajan, S. Bhattacharjee, I. Ganesh and **Roy Johnson (Indian Patent. No.2007700 Dated 20-09-2000)**
102. Improved additive composition useful for the preparation of alumina-based abrasion resistant material having improved wear properties and methods for their preparation, B.P. Saha, **Roy Johnson**, I. Ganesh, S. Bhattacharjee, and Y.R. Mahajan (**Indian patent 198068 dated 07-07-2006**)
103. A novel process for producing IR transparent polycrystalline alumina articles and the articles so produced, P. Biswas, K. Rajeswari, V. Mahender, P. Ramavath, Rajasekhara Reddy, **R. Johnson**, U. S. Hareesh (**Application No.: 365/DEL/2012, Filing date: 08-02-2012**)

Ph.D /M.Tech. / B.Tech. DISSERTATIONS

1. Experimental investigation of Sintering techniques on microstructural Evolution of Zirconia Ceramic by Ms. K. Rajeswari (**Ph.D awarded in Materials Engineering**), Central University, Hyderabad, 2010
2. Investigation on thermo-mechanical properties of Aluminium Titanate Ceramics by Ms. R. Papitha (**Ph.D awarded in Materials Engineering**), Central University, Hyderabad, 2010
3. Comparative Evaluation of CVD and Powder Processing of Manganese Aluminate Ceramics for Physico-Chemical, Thermal and Mechanical Properties by Ms. Papiya Biswas, **Ph.D awarded in Metallurgical Engineering** , NIT, Warangal 2018
4. Development of Powder Encapsulation Process for Hot Isostatic Pressing and Evaluation of Thermo- mechanical Properties of Ceramic Parts, Mr. Pandu Ramavath, **Ph.D Thesis submitted (Mechanical Engineering)** , Osmania University
5. Near-net shaping of simple and complex ceramic parts by 3D printing and investigations on the thermo-mechanical and microstructural properties, Mrs. S. Mamata (**Ph.D in Materials Engineering**), Central University, Hyderabad, 2010 (in progress)
6. Fabrication and mechanical behavior of metallic foam structures, K. Raju **Ph.D work in progress in Metallurgical Engineering** , NIT, Warangal 2018
7. Comparative Evaluation of Compaction and Extrusion of Ceramic Mixes by Mr. I.V.R.Srinivas, **M.Tech Dissertation project** report submitted to National Institute of Technology, Calicut, 2003
8. Thermal gel casting of Alumina Ceramics by Mr. Rakesh, **M.Tech Dissertation project** report submitted to National Institute of Technology, Warangal, 2010
9. Microwave Drying of Cellular Solids by Mr. Ravindra Kumar, **B.Tech Dissertation** submitted to IIT, Madras, 2001
10. Synthesis and Sinterability Studies and Zirconia Based Ceramics by Mr. Halhalli Shivakumar V., **B.Tech Dissertation** submitted to Gulbarga University, 1995-96
11. Mechanical and Thermal Properties of Zirconia & Zirconia Toughened Alumina by M.S. Padmalatha, **B. Tech Dissertation** submitted to Osmania University 1996-1997

12. Thermal Expansion Behavior of Cordierite Based Ceramic Honeycomb Structures by Ms. K. Soumya, **B. Tech Dissertations** submitted to PSG College of Engineering, Coimbatore, 2002.
13. Studies of Cellulose binders in ceramic processing by M. Mykanthreddy, (01261A1803) **B. Tech Dissertation**, submitted to MGIT, Hyderabad, 2009
14. Spray pyrolysis and rate controlled sintering of LSM powders by Ms..Neha Gupta, **M.Tech Dissertation project** report submitted to Thapper Institute of Technology, Chandigarh, 2006
15. Studies on Thermal, mechanical and physico-chemical properties on Ceramic Honeycomb Based cellular Solids by Mitali Dutta, **Grduate Engineering Training Report** submitted to ARC-I, Hyderabad, November, 2002
16. Rate Controlled sintering of Alumina Ceramics by Ms. Jyothi .K, **Grduate Engineering Training Report** submitted to ARC-I, Hyderabad, November , 2002
17. Studies on powder flow analysis and it's correlation to compaction behaviour in ceramic processing by Mr. Chetan Reddy , **B. Tech Dissertation** , submitted to Vellore Institute of Technology, Vellore, 2008
18. High temperature deformation studies on Zirconia Ceramics by Ms. Haritha, **B. Tech Dissertation**, submitted to BITS, Pilani, 2009
19. Rheological Behaviour of Oxide/Non Oxide based Ceramic Systems for the extrusion of honeycomb structures by Seetu Chacko, **M. Tech Project Report** submitted to ARC-I, Hyderabad, March, 2003
20. Fabrication of Alumina Ceramic through Thermal Gel casting Using Methyl Cellulose by Rakesh Anatharaju, **M.Tech Dissertation project** report submitted to NIT, Warangal, 2010
21. Development of Cordierite based Reticulated Foams with Improved Mechanical Properties for Porous Burner Applications by Mr.M.Varaprsad **M.Tech Dissertation** submitted to NIT, Warangal, 2016
22. Studies on Energy Absorption Properties of Polymer Encapsulated, Infiltrated and Laminated Cellular Ceramic Foams by Rajesh Kanike, **M.Tech., Dissertation Project Report** submitted to NIT, Warangal, 2017.

HONORS/AWARDS RECEIVED

1. Received Materials Research Society medal (MRSI- Medal) 2011
2. Received Pandit Malaviya Award of the Indian Ceramic Society, 2011
3. Received Technology award 2012 from ARCI
4. Theme leader for Indo-German Frontiers of Engineering Symposium 2014.
5. Received the **Best product Award** for the thin walled Honeycomb structures during **POWMET-99** during the international conference and annual technical meeting of Powder Metallurgy Association of India, 1999.
6. Received the Best paper Award for presentation on the mechanical behaviour of cordierite- Mullite honeycomb with foams during 13th Annual General meeting of **Material Research Society of India**, February 2002
7. Received the Best paper Award for presentation on the Rheometric Studies on cordierite Mullite precursor mix for extrusion of honeycombs during the 66th Annual Session of **Indian Ceramic Society**. December 2002
8. Received the **Best poster Award** by the group for the presentation on Fracture behaviour of ZnS Ceramics during the 73 rd Annual Session of **Indian Ceramic Society**. December 2009
9. Listed in **Marquis Who's Who in the World (2011)**, USA for the significant contributions to the betterment of contemporary society
10. Received **Doctor of Ministry (D. Min)**, 2010 from Logos Study Centre (affiliated with International Institute of Church Management, Florida, USA)

Annexure IV

MEMBERSHIP OF PROFESSIONAL SOCIETIES

1. Fellow of Indian Institute of Ceramics (**FIICer**)
2. Fellow of Institution of Chemists (**FIC**)
3. Member (2008-2010) **American Ceramic Society**
4. Associate Member of **Institution of Chemistry (AIC)**, India.
5. Life Member of **Indian Association for Environmental Management (IAEM)**, NEERI, Nagpur.
6. Life Member of **Indian Association for Nuclear Chemists and Allied Scientists (IANCS, Bombay)**.
7. Member (licentiate) of **Royal Society of Chemistry**, London. (1995)
8. Life Member, **Indian Ceramic Society**
9. Life Member, **Sensor Research Society**, India (2019)

Annexure V

Peer Recognition

Manuscript reviewer
Journal of American Ceramic Society
Journal of Alloys and Compounds
Journal of Solid State Chemistry
Journal of Material Science
Ionics
Transactions of Indian Ceramic Society