



**Dr. Resmi V. G**

**Assistant Professor**

**Department of Chemistry**

**E-mail: [resmiviswanadhan@gmail.com](mailto:resmiviswanadhan@gmail.com)**

**Mobile: 9446881235**

**Education**

Ph.D. (2017), CSIR-NIIST Thiruvananthapuram & University of Kerala

M.Phil Chemistry (2007, Bharathidasan University, Tamilnadu

B.Ed Physical Science (2006), University of Kerala, Thiruvananthapuram

M.Sc. Polymer Chemistry (2005), University of Kerala, Thiruvananthapuram

B.Sc. Polymer Chemistry (2003), University of Kerala, Thiruvananthapuram

**Expertise**

Porous ceramics and metal matrix composites.

**Work Experience**

25/07/2024 to till date

Assistant Professor, Department of Chemistry, VTM NSS College, Dhanuvachapuram

03-03-2016 to 19-07-2024

Assistant Professor, Department of Chemistry, M.G. College, Thiruvananthapuram

**Awards and achievements**

Council of Scientific and Industrial Research (CSIR)-JRF (NET) in chemical science June 2008

University First Rank - M.Sc Polymer chemistry 2005

Membership in  
Professional  
Bodies

Material Research Society of India (MRSI)

Indian Institute of Metals (IIM)

Research  
Publications

1. Processing of Porous SiC by Aluminum-Derived Binders and Sacrificial Porogen Leaching Method, **V.G. Resmi**, J. P. Deepa, V. Lakshmi, T. P. D. Rajan, C. Pavithran, B. C. Pai, *Int. J. Appl. Ceram. Technol.*, 12 [5] 967–975 (2015)
2. Processing of Silica bonded Porous SiC Preform for Metallic Composites, **V. G. Resmi**, K. M. Sree Manu, V. Lakshmi, M. Brahmakumar, T.P.D.Rajan, C. Pavithran, B.C. Pai, *J. Porous Mater.*, DOI: 10.1007/s10934-015-0025-7.
3. Processing of Porous Ceramics using Aluminium Derived Binders and Sacrificial Porogen Leaching Method, **V.G. Resmi**, K.M Sree Manu, J.P. Deepa, V. Lakshmi, T.P.D. Rajan, C. Pavithran and B.C.Pai, *Materials Science Forum Vols. 830-831 (2015) pp 448-451*
4. Concentration Dependent pore morphological Tuning of kaolin clay foams using Sodium Dodecyl sulphate as Foaming Agent, Lakshmi V., **Resmi V.G.**, Annu Raju, Deepa J.P., T.P.D. Rajan, C. Pavithran, B.C. Pai, *Ceramics International*, <http://dx.doi.org/10.1016/j.ceramint.2015.07.056>
5. Studies on the Influence of Surface Pre-treatments on Electroless Copper Coating of Boron Carbide Particles, J.P. Deepa, **V.G. Resmi**, T.P.D. Rajan, C. Pavithran and B.C. Pai; *Applied Surface Science* 257 (2011) 7466–7474
6. Studies on the Effect of Processing Parameters on Electroless Coating of Copper on Boron Carbide Particles, Deepa J.P., **Resmi V.G.**, T.P.D. Rajan, C.Pavithran and B.C. Pai; *Trans Ind. Inst. Metals* 64{1-2} (2011) 47-51.
7. Synthesis of porous SiC preform and squeeze infiltration processing of Aluminium-SiC Metal ceramic composites, K. M. Sree Manu, **V.G. Resmi**, M. Brahmakumar, N. Anand, T.P.D. Rajan, C. Pavithran, B.C. Pai, K. Manisekar *Materials Science Forum Vol. 710 (2012) pp 371-376*
8. Squeeze Infiltration Processing of Functionally Graded Aluminum–SiC Metal Ceramic Composites, K. M. Sree Manu, **V. G. Resmi**, M. Brahmakumar, P. Narayanasamy, T. P. D. Rajan, C. Pavithran, B. C. Pai , *Trans Indian Inst Met* 65(6) (2012) 747–751
9. Adduct modified nano-clay mineral dispersed polystyrene nanocomposites as advanced corrosion resistance coatings for aluminum alloys, Annu Raju, V. Lakshmi, R.K. Vishnu Prataap, **V.G. Resmi**, T.P.D. Rajan, C. Pavithran, V.S. Prasad, S. Mohan., *Applied Clay Science* 126 (2016) 81 –88.
10. Amino-functionalized breath-figure cavities in polystyrene–alumina hybrid films: effect of particle concentration and dispersion, Lakshmi V., Annu Raju, **Resmi V.G.**, Jerin K. Pancreicious, Rajan, T.P.D., Pavithran C., *Phys. Chem. Chem. Phys.* 2016, 18, 7367.
11. Kaolinite as a Low Temperature Binder for Porous Ceramic SiC Foam, **Resmi V.G.**, Annu Raju, C.K. Simi and Rajan T.P.D., *Teresian International Journal of Chemical Sciences*, October - December 2022, Volume III, Issue IV, ISSN 2583-2565.

Articles in  
Conference  
Proceedings/  
Poster/  
Oral  
Presentations

1. Synthesis of Porous SiC Preforms Using pore forming agent., Resmi V.G., Deepa J.P., T.P.D. Rajan, C. Pavithran and B.C. Pai, Presented in the International Conference on Advanced Functional Materials (ICAFM 2009), held at Thiruvananthapuram during 11-13 December.

2. Synthesis and Characterization of Porous SiC Preforms Using Inorganic salt pore forming Technique, Resmi V.G., Deepa J.P., T.P.D. Rajan, C. Pavithran and B.C. Pai., Presented in International Conference on Recent Trends in Materials Science and Technology held at Trivandrum during Oct 29-31 2010).

3. Fabrication of porous silicon carbide preform for synthesis of homogenous and functionally graded aluminum composites by squeeze infiltration techniques. V G. Resmi, T.P.D.Rajan, C. Pavithran and B.C. Pai ,Presentation in 65th Annual Technical Meeting, The Indian Institute of Metals, Nov. 13-16, 2011, Hyderabad).

4. Formation and Characterization of Electroless Copper Coating on B4C Ceramic Particles, Deepa J.P., Resmi V.G., T.P.D. Rajan, C. Pavithran and B.C. Pai , Presented in International Conference on Advanced Functional Materials (ICAFM 2009), held at Thiruvananthapuram during 11-13 December.

5. Studies on Effect of Surface Pre-treatments on Electroless Coating of Copper on Boron Carbide Particles, Deepa J.P., Resmi V.G., T.P.D. Rajan, C. Pavithran and B.C. Pai, Presented in International Conference on Recent Trends in Materials Science and Technology held at Trivandrum during Oct 29-31 2010).

6. Structural and Mechanical Characteristics of Infiltration Processed Metal Matrix Composites, K. M. Sree Manu, V G. Resmi, V. Lakshmi, T.P.D.Rajan, B.C. Pai, M. Brahmakumar, P. Narayanasamy, and K. Manisekhar, Proceeding of National Aerospace Manufacturing Seminar- Making, Shaping and Treating of Materials for Aerospace., Nov 18-19, 2011, SAME, Trivandrum