Faculty Profile

- 1. Name : Dr. R.Palanivelu
- 2. Designation : Professor and Head
- 3. Date of Joining : 19.08.1994
- 4. Nature of Association : Regular
- 5. E mail : hodchemistry<u>@ksrct.ac.in</u>
- 6. Mobile no. : 98652 35165

7. Academic Qualifications:

Course	Name of the Institution / University	Year of Passing	% of Marks	Class
Ph.D				
(Nano	Anna University, Chennai, India	Oct 2015	-	-
Science)				
M.Phil	Bharathidasan University- Trichy	Nov 2003	67.4	First
M.Sc.,	CBM College - CBE	May 1989	64.4	First
B.Sc.,	Kongunadu Arts & Science College - CBE	April 1986	59.9	Second
H.S.C.	Govt. Hr. Sec. School, Ulagappanpalayam, Tiruchengode, Namakkal	March 1983	61.0	First
S.S.L.C.	Govt. Hr. Sec. School, Elachipalayam, Tiruchengode, Namakkal	April 1981	64.0	First

8. Teaching Experience

Professor and Head, K.S.Rangasamy College of Technology, Tiruchengode, from 01.07.2010 to till-date.

Assistant Professor and Head, K.S.Rangasamy College of Technology, Tiruchengode, from 01.08.1997 to 30.06.2010.

Lecturer, K.S. Rangasamy College of Technology, Tiruchengode, from 19.08.1994 to 31.07.1997.

Lecturer, K.S. Rangasamy Institute of Technology, Tiruchengode, from 01.08.1991 to 18.08.1994.



9. Projects

DRDO

Title: Mono dispersed Colloidal and Cocoon Shaped Nano Silica Particles for Abrasive Applications

Ph. D

Thesis title: "Synthesis and Characterisation of Amorphous Nanosilica Particles From Rice Hulls Biomass For Different Industrial Applications"

10. Professional Strengths

- Good motivator and possess an ability to handle multiple tasks (i- Can Club-Chairman in KSR group of Institutions from 1991 till date through which more than 7000 students have been counseled so far for their betterment in both academic and personal life)
- Possess excellent logical and critical thinking for betterment of student's career growth
- Determined and goal-oriented
- Possess good management and communication skills
- In-depth knowledge of tools and techniques for effective teaching and learning activities
- Have good leadership and management skills
- Ability to solve issues in a quick and efficient manner

11. Research Fund: No. of Project Completed – 01 (DRDO, New Delhi) – 5 lakhs

12.Articles Published

PATENTS

1. **Palanivelu, R,** Padmanaban, P & Rajendran, V 2010, 'Processing of Amorphous nano silica particles from rice hulls through chemical route' Taylor and Francis, Indian Patent,

2786/CHE/2008 A.(Published on 21st May 2011 and Granted on 15th March 2017-Patent no: 281341.

 Rajendran, V , Palanivelu, R, Sutha, S & Umarani, C, 'Mono dispersed colloidal and cocoon shaped nano silica particles for industrial applications, 171/CHE/2009 Dt: 27/01/2009. Published on 13th January 2017. (Awaiting for the Granted Result)

13.International Journals

- **1. Palanivelu, R,** Padmanaban, P, Sutha, S & Rajendran, V 2014, 'Inexpensive approach for production of high-surface area silica nanoparticles from rice hulls biomass', IET Nanobiotechnology, vol. 8, no. 4, pp. 290-294. (IF: 1.72)
- Palanivelu, R, Manivasakan, P, Dhineshbabu, NR & Rajendran, V 2014, 'Comparative Study on Isolation and Characterization of Amorphous Silica Nanoparticles from Different Grades of Rice-Hulls', Synthesis and reactivity in inorganic metal-organic and nano-metal chemistry, (IF: 0.5)
- **3. Palanivelu, R,** Dhineshbabu, NR, Palanisamy, T, Balasubramaniam, S & Rajendran, V 2014, 'Comparative study of addition of amorphous nanosilica particles with different grades of cement mortar' International journal of Applied ceramics and Technology, pp. 1-9. (IF: 1.215)
- **4. Palanivelu, R,** Dhineshbabu, NR, Gobi, N, Thirunavukkarasu, G & Rajendran, V 2015, 'Enrichment of cotton fabrics through functionalised amorphous nanosilica particles' Journal of industrial textiles, (Under Review) (IF: 1.200)
- 5. Sutha, S, Palanivelu, R, Yuvakumar, R, & Rajendran, V 2013, 'Effect of thermal treatment on hydrophobicity of methyl-functionalised hybrid nano-silca particles', Materials Letters vol. 90, pp. 68-71. (IF: 2.26)
- Sutha, S, Palanivelu, R, Sakthipandi, K, Umarani, C & Rajendran, V 2012, 'Structural studies of Nanosilica employing on-line ultrasonic studies', Phase Transitions, vol.7, pp. 565-576. (IF: 1.04)
- 7. Gobi, N, **Palanivelu, R**, Ramachandran, TR & Rajendran, V 2011, 'Effect of silica nanoparticles and BTCA on physical properties of cotton fabrics', Materials Research,

vol. 14, pp. 552- 559. (IF: 2.1)

 Sasi priya K, Gopi N, Palanivelu R, Ramachandran TR & Rajendran V 2009, 'Influence og nano silica coating on functional properties of cotton fabrics' Advanced Materials Research, vol.67, pp. 149-154 (IF : 2.1)

- 9. Natarajan T, Kumaravel A & Palanivelu R 2016' Extraction and characterization of natural cellulosic fiber from passiflora foetida stem' International journal of polymer analysis and characterization, Vol 21 Page: 478-485 (IF : 1.7)
- Magibalan, S., Senthilkumar, P., Senthilkumar, C., Palanivelu, R., & Prabu, M. 'Dry sliding behavior of aluminium alloy 8011 with 4% fly ash' Materials Testing, 2018, 60(2), 209-214. doi 10.3139/120.111126 (IF-0.521)
- Magibalan, S., Senthilkumar, P., Senthilkumar, C., Palanivelu, R., & Prabu, M 'Dry sliding behavior of aluminium alloy 8011 with 12% fly ash composites' 2018, Materials Research Express 5(5), p.056505-16 (IF : 1.151)
- Magibalan, S., Senthilkumar, P., Senthilkumar, C., Palanivelu, R., & Prabu, M ' Microstructure and mechanical properties of fly ash particulate reinforced AA8011 aluminium alloy composites' Materials Testing, 60(7-8), 765-771 (IF : 0.521)
- Magibalan, S., Senthilkumar, P., Senthilkumar, C., Palanivelu, R., & Prabu, M, 'Dry sliding behavior of aluminium alloy 8011 with 8% fly ash' Materials Testing, 2018, 60(7-8), 777-782. (IF : 0.521)
- 14. Muthusamy Prabu, Subramanian Magibalan, Chinnamuthu Senthilkumar, Rajagounder palanivelu, Palanisamy Senthilkumar & rajendran Boopathi, 'Modeling of machining parameters for MRR and TWR in EDM characteristics on Al/10 wt.-% TiB₂ composites' Materials Testing, 2019, Volume 61 Issue 6 Pages 559-566.
- 14. Contributed Papers at International Conference/Seminar
- 1. **Palanivelu, R**, Padmanaban, P & Rajendran, V, 2009, 'Nanosilica for Industrial

Applications from Rice Hulls', 1st International Conference on Nanostructured Materials and Nano Composites (ICNM-2009), pp. 228-229.

2. **Palanivelu, R**, Padmanaban, P & Rajendran, V 2010, Synthesis and characterisation of amorphous nano silica particles from rice hulls employing thermal degradation method,

⁽International Conference on Nanomaterials and Nanotechnology (NANO-2010), K.S.Rangasamy College of Technology, pp. 62-62.

- Palanivelu, R, Gobi, N, Thirunavukkarasu, G & Rajendran, V 2012, Study of functional and physical properties of amorphous nano silica coated on cotton fabrics, International Conference on Macro- and Supramolecular Architects and Materials (MAM-12: Nano Systems and Applications), LeMeridian, pp. 333-340.
- Palanivelu, R & Rajendran, V, 2015, Different approaches for production of amorphous nanaosilica particles from rice hulls, International conference on MAM-15, KSRCT.

15. List of books publications

- Palanivelu, R., Srividhya, B., Tamilarasu, K. and Padmanaban, P. 2013. Engineering Chemistry. Cengage learning, New Delhi (ISBN13: 978-81-315-1795-6)
- Palanivelu, R. and Srividhya, B. 2013. Environmental Engineering. Cengage learning, New Delhi (ISBN13: 978-81-315-1794-9)
- 3. **Palanivelu, R. 2008**, Engineering chemistry-I, Pranav Publications, Tiruchengode.
- Palanivelu, R. B.Srividhya., (2000- 2015) Laboratory Manual for Enginnering Chemistry, Sakura Publications, Erode

16. Other Academic Accomplishments

 Resource Person for various colleges such as Dr.NGP Arts-Cbe, SNR Arts-Cbe, GCT- Cbe, GCE-Salem, K.S.R B.Ed College, K.S.R Arts and Science College, Nandha Engineering College, Excel Engineering College, Sengunthar Engineering College, Paavai Engineering College, Shanmuga Engg.College, Vellalar Arts and Science College for Women, Sona College of Technology, Mahendra Engineering College etc.,

2. Conducted International Conferences-3

- 1. NANO-2010: 28 countries participated with 3 Nobel Laureates.
- 2. MAM-12 (35 countries participated with 3 Nobel Laureates.
- NANO-15- DEC-07-10 (43 countries participated with 1 Nobel Laureate) with my research supervisor Dr. V.Rajendran, Director, CNSCST as Chair person for all the 3 events
- Conducted Exhibition SCITECH-2007 in our campus (1557 Schools participated in and around Tamil Nadu) with my research supervisor Dr. V.Rajendran as Chair person.
- 5. Conducted no. of national conferences/seminars/symposiums with my research supervisor Dr. V.Rajendran as Chair person in our campus.
- Conducted many college functions inclusive of annual day since 1991 as a coordinator in various events.

AWARDS

 Best Research Paper Award received for study of functional and physical properties of amorphous nano silica coated on cotton fabrics in MAM-12 International Conference with cash award of Rs. 10,000/ by international juries.

2. 23 times received 100 % Result producing award (with cash award of Rs.1000 each time)

17. Personal Details

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Fathers Name Date of Birth & Age	:	K.Rajagounder 13.05.1966 & 53 Years
Gender	:	Male
Marital Status	:	Married
Permanent Address	:	Olappalayam Elachipalayam (Po) Tiruchengode Namakkal- 637 202