

I. ACTIVITIES OF THE YEAR 2017-2018

- ❖ PG Department of Chemistry, NGM College organized a National Conference on **“Recent Innovations in Greener Nanotechnology”** on 21.07.2017 in commemoration of Diamond Jubilee Year Celebration.

Resource Persons:

- Dr. R. Ramaraj,
Professor & Head,
Department of Physical Chemistry,
Madurai Kamaraj University, Madurai.
- Dr. N. Ponpandian,
Professor & Head,
Department of Nanoscience and Technology,
Bharathiyar University, Coimbatore.



DESCRIPTION

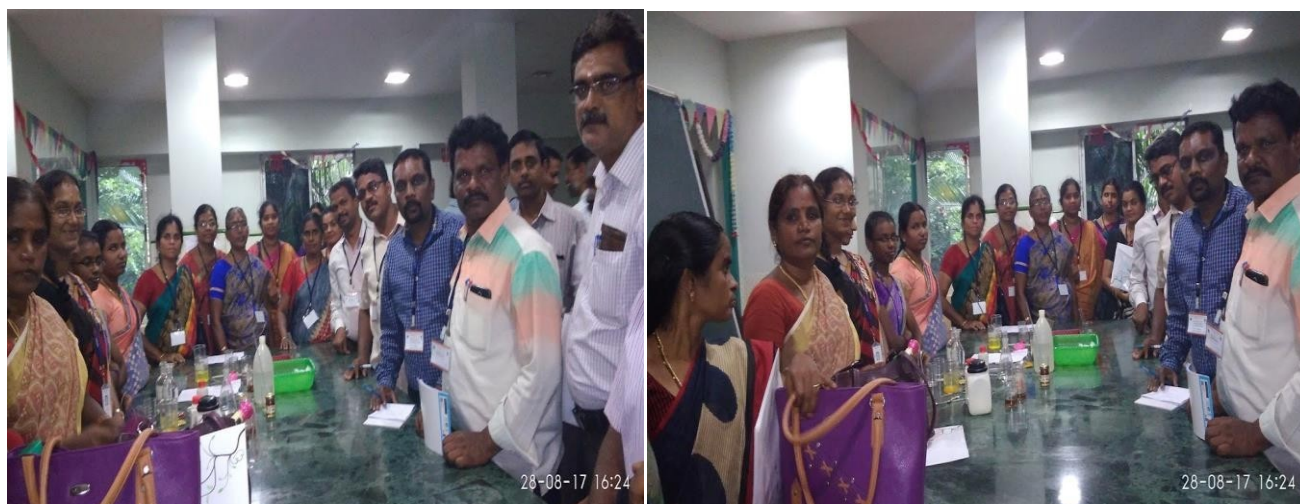
The Post Graduate Department of Chemistry has conducted a National Conference on “Recent Innovations in Greener Nanotechnology” on 21/07/2017. The conference was organized in commemoration of diamond jubilee year of our college. This conference brought together 175 participants from various colleges. As a mark of our tradition and culture, the dignitaries lighted the kuthuvillaku. Dr. K. Poonkodi, Assistant professor and Head, Department of Chemistry (PG) welcomed the gathering, Dr. P. M. Palanisamy, Principal NGM College, delivered the presidential address and insisted the importance and applications of nanomaterials. Following his speech, he honored the chief guest with a shawl and memento. The conference edition was released by the guest Dr. R. Ramaraj, Head of the department, Department of Physical Chemistry, Madurai Kamaraj University, Madurai. The inaugural address of the conference was delivered by the guest speaker Dr. R. Ramaraj, Head of the department, Department of Physical Chemistry, Madurai Kamaraj University, Madurai. Dr. Ramaraj congratulated the conference organizers and motivated the students to participate in this type of conferences to get to know about the recent researches in the field of nanosciences. His speech brought new insights into the history of various types of batteries, recent development of solar batteries and how nanotechnology is useful for solar energy conversion for power crises in the present scenario. He highlighted the new forms of energy generation, such as fuel cells, thermoelectric devices, solar cells, improved batteries which reflect the application of nanoscale materials. Green nanotechnology uses less light weight material that can be easily transported, and thereby saves energy and fuel. He pinpointed several instances in his experience and motivated the young minds. In the technical presentation, many papers were presented by participants on Nanoscience. The session concluded with vote of thanks.

In the afternoon session Dr. N. Ponpandiayan, Department of Nanoscience and Technology, Bharathiar University, Coimbatore focused on Graphene based nanomaterials for energy and environmental remediation. He elaborated on the graphene and its properties. Graphene is an allotrope of carbon which has enormous properties and is used for the preparation of energy related nanocomposites. Nanocomposite is a multiphase solid materials to which nanoparticles are added to enhance the property of that material. Graphene has low band gap so that it is useful for energy conversion. Graphene based nanocomposite acts as photocatalysts to reduce organic dyes. This session was followed by Valedictory Session. In the valedictory function, certificates were distributed to all the participants. The one day National Conference concluded with the vote of thanks.

II. Intra Department Activities

28.08.2017 – Inservice Training to Secondary Grade Science Teachers
supported by TSCST, Govt. of Tamilnadu.

- **Dr. K. Poonkodi**, Assistant Professor & Head, PG Department of Chemistry delivered a Guest Lecture on “Chemistry in Day to Day Life”.
- **The faculty members** of PG department of Chemistry conducted a **Technical Session** on “Identification of Adulterant in Food Ingredients by Simple Chemical Tests”.



The faculty members demonstrated the food adulteration experiments for various food products available in the market to the school teachers. The School teachers eagerly participated and learn the techniques to show their students.

III. INAUGURATION OF ASSOCIATION

PG Department of Chemistry, NGM College organized an Association Inauguration Cum Guest Lecture on “**NMR SPECTROSCOPY**” on 13.10.2017 in commemoration of Diamond Jubilee Year Celebration delivered by Dr.S.Ponnusamy, Associate Professor, Government Arts College, Coimbatore.





DESCRIPTION

The Association of Post Graduate Department of Chemistry “**CHEMergence – When you get here, you flourish**” was inaugurated on 03/10/2016. As a mark of our tradition and culture, the dignitaries lighted the kuthuvillaku. Dr. K. Poonkodi, Assistant professor and Head, Department of Chemistry (PG) welcomed the gathering, Dr. P. M. Palanisamy, Principal NGM College, delivered the presidential address and insisted the importance and applications of spectroscopy. Then, the office bearers of the association were introduced. Following the inauguration, a Guest Lecture was delivered as the first event of the association. Dr. S. Ponnusamy, Associate Professor, Government Arts College, Coimbatore delivered a lecture on “NMR SPECTROSCOPY”. His speech gave deep insight on the theory of spectroscopy and he insisted the various applications of NMR Spectroscopy. D. Bhavadharini of IInd M.Sc., Chemistry concluded the programme by proposing the vote of thanks.

IV. ONE DAY WORKSHOP

PG Department of Chemistry, NGM College organized a National level Workshop on “**MICROSCALE EXPERIMENTS IN CHEMISTRY**” on 09.01.2018, conducted by Dr. S. Murugan, Head (Rtd), Department of Chemistry, S.T. Hindu College, Nagercoil.



DESCRIPTION

PG Department of Chemistry has conducted a workshop on “MICROSCALE EXPERIMENTS IN CHEMISTRY” on 19/01/2018. As a mark of our tradition and culture, the dignitaries lighted the kuthuvillaku. Dr. K. Poonkodi, Assistant professor and Head, PG Department of Chemistry welcomed the gathering, Dr. P. M. Palanisamy, Principal NGM College, delivered the presidential address and insisted the importance of microscale experiments. He listed out the benefits of microscale experiments. Following his speech, he honored the chief guest with a shawl and memento. The guest speaker Dr. S. Murugan, Head (Rtd), Department of Chemistry, S.T. Hindu College, Nagercoil delivered his lecture on “Microscale Experiments in Chemistry”. He introduced several new techniques which utilizes minimum amount of chemicals. He enlightened our minds to a better less polluted world of chemistry. Following his speech, he gave hands on training on various inorganic and organic qualitative analyses. His training taught us to utilize small amount of reagents which in turn prevents the environment from pollution.

V. Research Publications

International Refereed Journals

1. **K. Poonkodi**, K. Vimala devi, M. Rubini, R. Priyadharshini and S. vinitha. Evaluation of invitro anticancer and anti inflammatory potential of *Mitracarpus villosus* (Sw) DC. **Int.J. Pharm.**, 2017, 7(2). (Scopus).

National Refereed Journals

1. **K.Poonkodi**, R. Anitha, S. Vasanthamani, J. Karthika and V. Tamilselvi. Evaluation Of Invitro Cytotoxicity Of Essential Oil From *Clausena dentata* (Willd) Grown In Western Ghats Region- South India, **Asian J.Chem.**, 2017, 29(7). (Scopus).

2. **K.Poonkodi**, S.Vidhya baranika, G.Pryanka, PU. Meha and R.Jeevitha. Chemical Composition and Anti-Inflammatory Potential of Essential Oil of *Alpinia calcarata* ROSC. - grown in South India. **Int. J. Pharm. Sci. Rev. Res.**, 2017; 42(1), 207-210. (Scopus).

3. **K.Poonkodi**, K. Gomathi, M.Akila, S.Deepadevi and A.Dhivya. Gas chromatography-mass spectrometry analysis and in vitro antioxidant activities of *Ruta graveolens* L. From Western ghats region - South India. **Asian J Pharm Clin Res**, 2017, Vol 10(5), 297-301. (Scopus).

4. **K.Poonkodi**, V. Jayapriya, K. Sujitha, R. Jeevitha and PU. Megha. In-vitro Anticancer Activity and Essential oil Composition of *Tridax procumbens* (L.), **Am.J.Pharm Tech Res.**, 2017, 7(2).

5. **K. Poonkodi**, J.Karthika, V. Tamilselvi, R. Anitha and S.Vasanthamani. Chemical composition of essential oil of *Hyptis suaveolens* (L.) POIT and its invitro anticancer activity. **J Pharm Res.**, 2017, 11 (5), 410—413.

6. **K.Poonkodi**, K.Vimaladevi and R.Mini, Chemical Composition and In vitro Antimicrobial, Anti-MRSA Activities of Essential Oil of *Clerodendrum inerme* (L.) Gaertn- grown in Western Ghats Region. **Int. Chemtech research.**, 2017, 10(8). (Scopus).

7. **K.Poonkodi**. Medicinal plants are boon to future, Kalanjium, Sep2017

VI. FDP/ Conference/ Seminar/Workshop/ orientation programme attended

- ❖ All faculty members edited book on **“Recent Innovations in Greener Nanotechnology”** with ISBN Number - 9788193388266
- ❖ All faculty and students has participated one day Hands on training in UV-Visible Spectrophotometer organized by UG department of Chemistry, NGM College, Pollachi on 24.02.2017.
- ❖ All faculty and II-MSc students has participated Training cum Workshop on Basic Techniques in Botany, Department of Botany, NGM College, Pollachi on 15.03.2017.
- ❖ Dr. K.Poonkodi and II-MSc students has attended CSIR sponsored two-day national seminar on Applications of nano materials in Agricultural and Crop protection organized by department of Science & Humanities, P.A. College of engineering and Technology, Pollachi on 14th and 15th September 2017.
- ❖ Dr.K.Poonkodi presented a paper in one day **“International Seminar** on “The Success of Modern Life lies in Harmony with Nature” organized by Department of Human Excellence, NGM College, Pollachi on 21st September 2017.
- ❖ Dr.K.Poonkodi attended one day national level Symposium on Heath, Fitness and Wellness” organized by Department of Physical Education, NGM College, Pollachi on 01.11.2017.
- ❖ Dr.K.Poonkodi attended one day “National level Workshop on “Nanomaterials and Nanochemistry organized by PG and Research Department of Chemistry, PSGR Krishnammal College for Women, Coimbatore on 22nd December 2017.
- ❖ Ms. R.Mini attended one day “National level Workshop on “Nanomaterials and Nanochemistry organized by PG and Research Department of Chemistry, PSGR Krishnammal College for Women, Coimbatore on 22nd December 2017.
- ❖ All faculty and Students has participated INSA sponsored Two-Day National level workshop on “Recent Trends in Chemistry”, organized by Department of Chemistry, NGM College (Autonomous), Pollachi on 11th and 12th January 2018.
- ❖ Ms.R.Mini participated one day workshop on “E-Content Development” at NGM College on 11th April 2018.
- ❖ All Faculty members attended Two- day CSIR Sponsored National Seminar on “Applications of Carbon based Nanomaterials for Environmental Sustainability” organized by PA College of Engineering and Technology, Pollachi, 12th and 13th April 2018.