

# **Biodata**

**Dr. Chithra Sekhar V**

Email address: [chithra.sekhar@sdcollege.in](mailto:chithra.sekhar@sdcollege.in)

Assistant Professor

Department of Chemistry

SD College

Alappuzha

**Chitranjali,  
Anayadi PO  
Sooranad North  
Kollam,  
Pin: 690561**

## **Personal information**

Date of Birth: 22/03/1987

Marital Status: Married

## **Academic Qualification**

### **PhD**

University of Kerala, Kariavattom                      February 2020

### **MSc Chemistry**

SN College, Kollam    2009-2011

### **BSc Chemistry**

University College, Thiruvananthapuram              2005-2008

## **Qualified CSIR UGC NET June 2014**

## **Research and Teaching Experience**

- Project Fellow, NCESS, Trivandrum (2012-2013)
- Faculty, TIME Entrance Coaching Centre, Thiruvananthapuram (2013-2015)
- Guest Lecturer, NSS Hindu College, Changanacherry (2019-2020)

## **Instrumental Experience**

- Atomic Absorption Spectrometer
- DLS & Zetaziser
- UV-visible spectrophotometer

## PAPERS PUBLISHED

- Thayyath. S. Anirudhan, Chithra S. Vasantha, Athira V. Sasidharan, Layer-by-layer assembly of hyaluronic acid/carboxymethyl chitosan polyelectrolytes on the surface of aminated mesoporous silica for the oral delivery of 5-fluorouracil, *European Polymer Journal* 93 (2017) 572-589.
- Anirudhan T. S., Syam S. Nair, Chithra Sekhar V., Deposition of gold-cellulose hybrid nanofiller on a polyelectrolyte membrane constructed using guar gum and poly (vinyl alcohol) for transdermal drug delivery, *Journal of Membrane Science* 539 (2017) 344-357.
- T.S. Anirudhan, V. S. Athira, V. Chithra Sekhar, "Electrochemical sensing and nano molar level detection of Bisphenol-A with molecularly imprinted polymer tailored on multiwalled carbon nanotubes", *Polymer* 146 (2018) 312-320.
- T. S. Anirudhan, Chithra Sekhar V., Syam S. Nair, Polyelectrolyte complexes of carboxymethyl chitosan/alginate-based drug carrier for targeted and controlled release of dual drug, *Journal of Drug Delivery Science and Technology* 51 (2019) 569-582.
- T. S. Anirudhan, Chithra Sekhar V., Shainy F, Effect of dual stimuli responsive dextran/nanocellulose polyelectrolyte complexes for chemo photothermal synergistic cancer therapy, *International Journal of Biological Macromolecules*, 135 (2019) 776-789.
- T.S. Anirudhan,V. Chithra Sekhar, V.S. Athira, Graphene oxide based functionalized chitosan polyelectrolyte nanocomposite for targeted and pH responsive drug delivery, *International Journal of Biological Macromolecules* 150 (2020) 468-479.
- T.S. Anirudhan, Chithra Sekhar V., Fabrication of functionalized layered double hydroxide nanocomposite with dual responsive drug release for the targeted chemo photothermal therapy of breast cancer, *European Polymer Journal* 139 (2020) 109993.
- J.R. Deepa, T.S. Anirudhan, Gowri Soman, V. Chithra Sekhar., Electrochemical sensing of methylmalonic acid based on molecularly imprinted polymer modified with graphene oxide and gold nanoparticles, *Microchemical Journal* 159 (2020) 105489.
- T.S. Anirudhan, V. Manjusha, V. Chithra Sekhar., A new biodegradable nano cellulose-based drug delivery system for pH-controlled delivery of curcumin, *International Journal of Biological Macromolecules* 183 (2021) 2044-2054.
- T.S. Anirudhan, F. Shainy, V. Chithra Sekhar, Highly efficient photocatalytic degradation of chlorpyrifos in aqueous solutions by nano hydroxyapatite modified cfo/zno nanorod composite, *journal of photochemistry & photobiology, a: chemistry* 418 (2021) 113333.

## PAPERS PRESENTED

- Chithra Sekhar.V, Athira VS, T S Anirudhan, Synthesis and characterization of polyelectrolyte multilayer functionalized mesoporous silica nano particles for the effective pH responsive delivery of anticancer drug (oral presentation) ; National

conference on Colloquium on Exotic Materials and its Implication in Societal Life, Organized by Post Graduate Department of Chemistry, Sri Vyasa NSS College, Wadakkancherry, Thrissur; 17-18 December 2015, Funded by UGC

- T S Anirudhan\*, Chithra Sekhar.V, Deepa J R, Anoop S Nair; Synthesis and characterization of polyelectrolyte multilayer functionalized mesoporous silica nanoparticles for the delivery of 5-fluorouracil: an *In vitro* study (oral presentation); 28<sup>th</sup> Kerala Science Congress, University of Calicut, Malappuram; 28-30 January 2016
- ChithraSekhar. V, Athira V.S, Anirudhan T. S; Synthesis and Fabrication of polyelectrolyte multilayer functionalized mesoporous silica nanoparticles for the effective pH responsive delivery of 5-Fluorouracil to cancer cells (oral presentation); National conference on Material Science and Technology, Organized by Department of Chemistry, NIIST, Thiruvananthapuram, 12-14 July 2016.
- Chithra Sekhar.V, Syam S Nair, Anoop S Nair, T S Anirudhan\*; Novel composite matrix for the controlled release of dual drugs by oral administration (poster presentation); National conference on Current Trends in Chemistry CTRIC 2017, Organized by Department of Applied Chemistry, Cusat, Kochi, 3-4 February 2017. Funded by UGC, DST, KCSTE.
- S. V. Chithra, J. Christa, J. R. Deepa, pH responsive composite matrix as an oral device for the controlled release of dual drugs (poster presentation); Indo- Japan Joint Symposium on Polymeric materials held at Trivandrum, India, 31<sup>st</sup> January-1<sup>st</sup> February, 2017
- Chithra Sekhar V, Anoop S Nair, Syam S Nair, Athira V S, Thayyath S Anirudhan, Stimuli responsive composite matrix as an oral device for the controlled release of 5-Fluorouracil and curcumin (oral presentation); International Symposium on New Trends in Applied Chemistry, organized by Post Graduate and Research Department of Chemistry, Sacred Heart College, Thevara, Kochi, 9-11 February 2017
- Chithra V Sekhar, Anoop S Nair, Syam S Nair, Thayyath S Anirudhan, Novel pH responsive composite matrix as an oral device for the controlled release of 5-fluorouracil and curcumin: An *In vitro* study, (oral presentation); International conference on Tropical Plants and Molecular Design organized by Post Graduate and Research Department of Chemistry, TKM College of Arts and Science, Kollam, 14-15 February 2017, Funded by DBT, Govt. of India, KCSTE, Govt. of Kerala.

## **BEST PRESENTATION AWARDS**

- Chithra Sekhar V., Athira V. S., “Synthesis and characterization of polyelectrolyte multilayer functionalized mesoporous silica nanoparticles for the effective pH responsive delivery of anticancer drug”, Colloquium on exotic materials and its implication in societal life organized by Sri Vyasa NSS college, Thrissur on December 17-18, 2015 sponsored by University Grant Commission.
- Syam S. Nair, Chithra Sekhar V., T. S. Anirudhan, “Skin penetration enhancement using surface engineered gold nanoparticles- a new platform for transdermal drug delivery”, International seminar on recent biochemical approaches in therapeutics: RBAT-IV, January 23-25, 2018.
- Chithra Sekhar V., Syam S. Nair, “Biocompatible aminated graphene oxide nanoparticle-based drug delivery platform for pH responsive triggered release of doxorubicin: an in vitro study”, Three-day national seminar on Insights into the interdisciplinary perspectives of chemical and bio sciences organized by Department of Chemistry, Govt. Arts College, Thiruvananthapuram on February 26-28, 2018.
- Chithra Sekhar V., “Layered double hydroxide functionalized gold nanoparticles with dual responsive drug release for synergistic targeted chemo-photothermal therapy of breast cancer”, International Conference on Chemistry and Physics of Materials (ICCPM 2018) Sponsored by UGC, SERB INDIA, Royal Society of Chemistry, ACS, KCSTE, Organized by Research and PG Dept. of Chemistry, St. Thomas College, Thrissur on 19-21th December 2018. (ACS Publication Certificate)

## **AREA OF INTEREST**

- Nanochemistry
- Material Chemistry
- Organic Chemistry

## **AREA OF RESEARCH**

- Polymer & Adsorption
- Drug delivery

- Medicinal Chemistry
- Analytical chemistry

All the facts stated above are true to the best of my knowledge, belief and information

Alappuzha

Date: 16/02/2024

Chithra Sekhar V.