Dr. NARAYANA NAGESH Chief Scientist, CCMB, Hyderabad-500007, Telangana, India.

Date of birth: 31-10-1964, Male. Address for Correspondence: *Dr. N. Nagesh, Chief Scientist, Centre for Cellular and Molecular Biology, Uppal Road, Hyderabad-500 007, Telangana. India.*

Phone: + 91- 040 – 27195563 (Office) FAX : 040-27160591 ; 040-27160311 nagesh@ccmb.res.in or nagesh5112@gmail.com http://e-portal.ccmb.res.in/e-space/nagesh/index.html

> Educational Details.

Doctor of Philosophy (**PhD.**,) : From S.V. University, Tirupati, A.P., India. "Studies on the Structure and Interaction of G-Quadruplex DNA with Metal Ions and Drugs".

Post-Doctorate : With Prof. Edwin A Lewis, Department of Chemistry at North Arizona University, Flagstaff, Arizona, USA. *"Studies on Bcl2 Quadruplex DNA interaction with Porphyrins"*.

> Professional Details.

Joined CCMB as Scientist-B in the year 1990. Serving CCMB now as Chief Scientist.

> Research interests and Area of expertise.

- Interested in the studies involving G-quadruplex DNA and its interaction with metals, macromolecules, ligands.
- Synthesis and identification of novel organic and inorganic complexes that will improve anti- cancer, pro-apoptotic and anti-cancer cell proliferation activity both under *in vitro* and *in vivo* conditions by topological, pharmacophores modification of synthetic molecules.
- Biophysics, Biochemistry, Chemistry, Medicinal Chemistry and Chemical Biology.

Research Projects.

I. Projects completed.

Successfully completed Indo-Swiss Joint Research Project (ISJRP) 2012-15; A project from DST, 2012-15; NanoSHE project: (a XII FYP project) Project obtained from CSIR; One FTT and Misson Mode project from CSIR, 2017-2020.

II. Projects in progress:

Having one **FTT** (from 2020-2022), Project title -"Homocysteine Specific Novel Sensor for Diagnostic Use". And I am associated with a DBT project "Development of novel gene/vaccine delivery vectors derived from novel animal adenoviruses isolated from India". Duration from 2019-2022.

Students Guided: about 23.

Total about 23 students at different levels of University education. Dissertation students: Twelve (5- M Tech, 2- M Pharm., and 6 - M.Sc., Students) Graduate students: Four (one from USA and three from India). Summer Trainees: Seven.

> Examiner for Phd thesis.

Several PhD theses were examined as an external PhD thesis examiner in various Institutes / Universities.

> Reviewer for journals and funding agencies.

Reviewer for several research articles submitted to reputed international journals and funding agencies in India and abroad.

Reviewed articles submitted to journals like, Nature Scientific Reports, Biochimica et Biophysica Acta (BBA) - General Subjects, Chem Com., RSC-Advances, PLoS ONE, Tumor Biology, Bioinorganic Chemistry and Application Journal, Current Analytical Chemistry Journal, Advances in Applied Research, Journal of Nucleic Acids, and several other journals.

Editorial board member for few related and reputed international journals.

Reviewer for several National (like DST, DBT and CSIR) and International funding agencies like EPSRC, UK; MRC,UK; Fondazione Cassa di Risparmio di Padova e Rovigo, Italy; Czech Science Foundation, Czech Republic etc., funding agencies. International committee member for PRIB 2008, international conference.

TWAS-COMSTECH Research Grants Committee under Pharmaceutical Sciences.

External reviewer for the University of Sharjah (UoS).

Presentations in the International and National conferences.

Attended several National and International conferences and workshops and presented my work.

> Achievements.

M.Sc., – University II rank in the year 1987.

MPhil., - University Merit scholarship, from 1987- 1990.

PDF.,- Received NAU-TRIF award and Arizona Biomedical Research (ABRC) award from USA-2006-2007.

Having collaboration with several senior scientists in India and abroad.

➢ Details of Patents − 2.

➢ Google scholar citation indices (as on 03-12-2020).

Citations - 1625, h- index – 25, i10 index - 47.

Google Scholar link: <u>https://scholar.google.com/citations?user=LyEEME8AAAAJ&hl=en</u>

> List of publication.

• Till now, about 71 research articles, review articles were published in various International/ National peer reviewed research journals. Details of few recent publications (in reverse chronological order) are provided under the heading "*Publications*" below.

> Publications :

- Design, synthesis and biological evaluation of new β-carboline-bisindole compounds as DNA binding, photocleavage agents and topoisomerase inhibitors. (2018) Jeshma Kovvuri, Burri Nagaraju, V. Lakshma Nayak, Ravi kumar Akunuri, M.P.Narasimha Rao, Ayyappan Ajitha, Narayana Nagesh*, Ahmed Kamal*. *European Journal of Medicinal Chemistry*. Volume 143, 1563-1577. (IF- 4.8).
- Synthesis of podophyllotoxin linked β-carboline congeners as potential anticancer agents and DNA topoisomerase II inhibitors. (2018) Manda Sathish, Botla Kavitha, V. Lakshma Nayak, Yellaiah Tangella, Ayyappan Ajitha, Shalini Nekkanti, Abdullah Alarifi, Nagula Shankaraiah, Narayana Nagesh*, Ahmed Kamal*. *European Journal of Medicinal Chemistry*. Volume 144, 557-571. (IF- 4.8).
- Novel amphiphilic G-Quadruplex binding synthetic derivative of TMPyP4 and its effect on cancer cell proliferation and apoptosis induction (2018) Ushasri Chilakamarthi, Koteshwar Devulapally, Sudhakar Jinka, Vamsi Krishna Narra, Kathyayani Sridharan, Narayana Nagesh,* Lingamallu Giribabu.* *ACS-Biochemistry*, 57 (46), 6514-6527. DOI: 10.1021/acs.biochem.8b00843 (IF- 2.9).
- Telomerase inhibition and human telomeric G-quadruplex DNA stabilization by a βcarboline–benzimidazole derivative at low concentration.(2017) Kranthikumar Yadav, Penchala Narasimha Rao Meka, Sudeshna Sadhu, Sravanthi Devi Guggilapu,

Jeshma Kovvuri, Ahmed Kamal, Ragampeta Srinivas, Panuganti Devayani, Bathini Nagendra Babu, and **Narayana Nagesh***. *ACS Biochemistry*, 56 (33), 4392–4404. DOI: 10.1021/acs.biochem.7b00008. (IF-2.9).

- Design, synthesis, *in vitro* and *in vivo* evaluation of (Z)-3,4,5-Trimethoxystyryl Benzene - sulfonamides /Sulfonates as highly potent tubulin polymerization inhibitors. (2017) Rasala Mahesh, V. Lakshma Nayak, Korrapati Suresh Babu, Riyaz, Sd., Thokhir B. Shaik, G. Bharth Kumar, Mallipeddi. P. L., Ch. Ratna Reddy, Kunta Chandra Shekar, Jedy Jose, Narayana Nagesh,* Ahmed Kamal.* *Chem Med Chem.* 12, 678–700. DOI-10.1002/cmdc.201600643. (IF-3.0).
- Synthesis, DNA binding affinity and anticancer activity of novel 4Hbenzo[g][1,2,3]triazolo [5,1-c][1,4]oxazocines. (2016) K. N. Visweswara Sastry, Sunitha Routhu, Soma Gupta Datta, **Narayana Nagesh**,* Bathini Nagendra Babu, Jagadeesh Babu Nanubolu, C. Ganesh Kumar, Ram Awatar Maurya* and Ahmed Kamal*. *Organic Biomolecular Chemistry*, 14, 9294–9305. (I.F- 3.6).
- Sugar-boronate ester scaffold tethered pyridylimine palladium(II) complexes: Synthesis and their in vitro anticancer evaluation. (2015) Eda Rami Reddy, Rajiv Trivedi*, Akella Venkata Subrahmanya Sarma, Balasubramanian Sridhar,Hasitha Shilpa Anantharaju,Dharmarajan Sriram, Perumal Yogeeswari, **Narayana Nagesh***. *Dalton Transactions*, 44,17600-17616. (IF- 4.1).
- A dihydroindolizino indole derivative selectively stabilizes G-quadruplex DNA and down regulates c-MYC expression in human cancer cells. (2015) Narayana Nagesh*, G. Raju, R. Srinivas, P. Ramesh, M. Damoder Reddy, Ch. Raji Reddy. *Biochimica et Biophysica Acta (BBA)-General Subjects*, 1850(1), 129-140. (IF-4.4).
- Biological Studies of Chalcogenolato-Bridged Dinuclear Half-Sandwich Complexes. (2013) Justin P Johnpeter, Gajendra Gupta, Jerald Mahesh Kumar, Gunda Srinivas, Narayana Nagesh*, Bruno Therrien*. ACS- Inorg. Chem., 52 (23), 13663-13673. doi: 10.1021/ic4022307. (IF-4.6).
- Studies on the site and mode of TMPyP4 interactions with Bcl -2 Promoter Sequence G-quadruplexes. (2010) Narayana Nagesh*, Robert Buscaglia, Jamie M. Dettler and Edwin A. Lewis*. *Biophys J.* 98 (11), 2628-2633. (IF-4.0).