

Resume

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6.	NLS, Hyderabad; CVRLS, Hyderabad; DFPL, Meerut & KAFL, Hyderabad. Professor of Practice, CUTM.	Technical Advisor / Consultant	01.10.2021	Present
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Overview of Research and Managerial Experience:

Over the 30 plus years of extensive experience in heading Research & Development Institutions, Departments in Academia, and guiding the start-ups, I have acquired excellence in managing large teams and organizations as per the vision and mission of the organization.

I have been a member of leadership team involved in Successfully setting-up **new business verticals** for Tata Chemicals Limited (Nutra - *FOS* and Nano materials - *Nano Silica*); new Crop protection company for NFCL (Fertis India Pvt. Ltd.); and two new healthcare companies (Neeta Life Sciences Pvt. Ltd & CVR Life Sciences Pvt. Ltd.) for the Navayuga Engineering Group; apart from introducing new technologies (Cocrystallization and Nanotechnology) which resulted in enhanced process optimization.

During my tenure in academia (1991 TO 2007) apart from successfully carrying out GOI funded R&D projects, we drafted the upgraded curriculum at Sri Sathya Sai Institute of Higher Learning, to make it relevant to the present-day advances and requirements of Indian Industry. As head of Center for Drug Repurposing at Dr. Reddy's Institute of Life Sciences, I crafted the policy of the first of its kind PPP model Research Institute in Pharmaceutical Industry in 2007, and was primarily responsible for introducing the repurposing of drugs as a viable solution in drug discovery. As Head of the Innovation Center of Tata Chemicals Ltd., at Pune with 100 plus strong team, I have networked across industries and academia in India and abroad for collaborations and advancement of cutting-edge technologies. During this journey the whole life cycle of Ideation to reaching the Market (TRL-1 to TRL-9) was done in two diverse domains – one in Nutra (Pre-biotics) and the other in Nanomaterials – Tyre grade Nano Silica. Both of these have now become TWO New Business Verticals for Tata Chemicals Ltd. Since, Rallis India is a associate company of TCL, I was also heading the Rallis Chemistry Research. Given this experience, I moved to NFCL and helped them to diversify into Crop Formulations that resulted in setting up a new company – Fertis India Pvt. Ltd.

Around this time 2019, Shapoorji Group was keen to diversify into Nutraceuticals and Preventive Healthcare (a vertical I initiated at TCL), hence I took up dual role of Adviser at FIPL and Shapoorji Group, in particular their Mistry Ventures LLP company. Here I had the opportunity to do Technical due Diligence for the ventures arm for investment into early and mid-stage start-ups, apart from running a preventive healthcare company (Arna Immuno Ingredients Pvt. Ltd.) which developed synergistic nutraceutical combos for specific pre-disease conditions. This whole research was conducted in a virtual mode, and we successfully developed a novel nutraceutical combo for sub-clinical inflammation, this product is now out-licensed to a nutraceutical company in India.

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In 2023, I moved into free lancing technical consultancy mode, and presently am guiding the start-ups – Neeta Life Sciences Pvt. Ltd & CVR Life Sciences Pvt. Ltd. (both funded by Navayuga Engineering Group), Mistry ventures LLP (Funded by Shapoorji Group), apart from being a technical consultant to Dayal Fertilizers Pvt. Ltd., Meerut & Pavaman Agro (a group company of Kapil Group, Hyderabad). I am also Professor of Practice at Centurion University, Bhubaneshwar – here I am involved in translational research of the R&D output of the university in the area of Biotechnology and Life Sciences.

4.	HONORS/ AWARDS
	<ul style="list-style-type: none"> i. Young Teachers Career Award, 1996 (AICTE, New Delhi). ii. Member, Board of Studies, Chemistry Division, Sri Sathya Sai University, PN, A. P., India (2003 – 2007). iii. Top Innovator from India for the year 2008–09, by Intellectual Ventures, USA. iv. Member, Domain Expert Group, Mission Mode Project on Salt and Potash, CSIR, New Delhi (2016 – 2019) v. Member, Research Council, CSIR - Central Salt and Marine Chemicals Research Institute (CSMCRI), Bhavnagar (2016 – 2019) vi. Director, Biovalley Incubation Council, Andhra Pradesh MedTech Zone (AMTZ), Visakhapatnam, AP (2018 – 2020) vii. Chairman, Institutional Ethics Committee, Sankar Foundation Eye Hospital, Vepagunta, Visakhapatnam. (2011 – 2022) viii. Director, Neeta Life Sciences and CVR Life Sciences, Hyderabad (2023 – present)
5.	PUBLICATIONS
i. Books: 03 iv. Patents: 23	ii. Research Papers, Reports: 40 iii. General articles: 05 v. Others (Please specify): Articles in Books – 03

List of selected Publications:

Books Co-Authored:  "Green Chemistry and Engineering", Doble Mukesh and Anil Kumar, Elsevier Butterwoth-Heinemann, Burlington, USA, 2007.  "Biotreatment of Industrial Effluents", Doble Mukesh and Anil Kumar, Elsevier Butterwoth-Heinemann, Burlington, USA, 2005.  "Biotransformations and Bioprocesses" Doble Mukesh, Anil Kumar Kruthiventi and Vilas GajananGaikar, Marcel & Dekker, Inc., New York, USA., 2004.  A chapter titled "Alternate energy sources" in the book titled "Renewable Energy Focus Handbook" by Elsevier, Academic Press, Amsterdam, Dec 2008. Some of the well cited publications: ➤ Potential Nutraceuticals for COVID-19, Savant S, Srinivasan S and Kruthiventi AK*, Nutrition and Dietary Supplements, 13: 25-31, 2021. DOI https://doi.org/10.2147/NDS.S294231

- Fluoroquinolone Salts with Carboxylic Acids, J. Satyanarayana Reddy, Saraswatula Viswanadha Ganesh, Ravikumar Nagalapalli, Rambabu Dandela, K. Anand Solomon, K. Anil Kumar*, N. Rajesh Goud, Ashwini Nangia*, *Journal of Pharmaceutical Sciences*, DOI 10.1002/jps, 2011.
- Inhibition of Mycobacterial Growth by Plumbagin Derivatives, Ritta Mathew[†], Anil K. Kruthiventi[†] Jalli V. Prasad , Sadula P. Kumar , Garlapati Srinu and Dipankar Chatterji, *Chemical Biology & Drug Design*, 76: 34–42, 2010. DOI 10.1111/j.1747-0285.2010.00987.x
- Efficient catalyst-free Domino approach for the synthesis of novel 2-benzazepine derivatives in water, J. Venkata Prasad, Maddela Prabhakar, K. Manjulatha, D. Rambabu, K. Anand Solomon, G. Gopi Krishna, K. Anil Kumar*, *Tetlett*, 51, 3109-3111, 2010.
- Michael-Type Adducts of 3-Carbethoxycoumarins via Diels-Alder Reaction: Tandem Ring Construction of Europyranochroman-2-one Skeletons, Prabhakar, Maddela; Reddy, G. Narendra; Srinu, G.; Manjulatha, K.; Prasad, J. Venkata; Kumar, S. Pramod; Srinivas, O.; Iqbal, Javed; Kumar, K. Anil* : *Synlett.*, No:6, 947-951, 2010.
- Crystal Structures of Norfloxacin Hydrates, Saikat Roy, N. Rajesh Goud, N. Jagadeesh Babu, Javed Iqbal, Anil K. Kruthiventi*, Ashwini Nangia*, *Crystal Growth and Design* 2008, 8(12), 4343-4346.
- Synergism between natural products and antibiotics against infectious diseases, Shanmugam Hemaiswarya, Anil Kumar Kruthiventi* and Mukesh Doble*, *Phytomedicine* 2008, 15, 639–652
- Equilibrium and Kinetic Studies for Fluoride Adsorption from Water on Zirconium Impregnated Coconut Shell Carbon, R. Sai Sathish, N. S. R. Raju, G. S. Raju, G. Nageswara Rao, K. Anil Kumar & C. Janardhana, *Separation Science and Technology*, Volume 42, Issue 4, 2007 , 769 – 788.
- Synthesis, anti-fungal activity evaluation and QSAR studies on podophyllotoxin derivatives, K. Anil Kumar, Sanjay Kumar Singh, B. Siva Kumar and Mukesh Doble, *Central European Journal of Chemistry*, 5(3): 2007, 880–897.
- A water-soluble fluorescent fluoride ion probe based on Alizarin Red S-Al(III) complex, Sai Sathish R, Ravi Kumar M, Nageswara Rao G, Anil Kumar K, Janardhana C., *Spectrochim Acta A Mol Biomol Spectrosc.*, 66(2): 2007, 457-61.
- Experimental and modelling studies on antifungal. compounds. Mukesh Doble and K. Anil Kumar, *Central European Journal of Chemistry*, 4(3): 2006, 428–439.
- Fluorescent fluoride ion probe based on 8-HQ, R. Sai Sathish, U. Sujith, G. Nageswara Rao , C. Janardhana and Anil kumar, *Spectrochimica Acta Part A*, 2006; 65(3-4): 565–570.
- Fluorescent fluoride ion probe based on 3-hydroxyflavone, R. Sai Sathish, G. Narayan, G. Nageswara Rao, C. Janardhana and Anil Kumar, *Journal of Fluorescence*, 2007; 17: 1-5.
- A water-soluble fluorescent fluoride ion probe based on Alizarin Red S-Al(III) complex, Sai Sathish R, Ravi Kumar M, Nageswara Rao G, Anil Kumar K, Janardhana C., *Spectrochim Acta A Mol Biomol Spectrosc.*, 66(2):457-61, 2007.
- Experimental and modelling studies on antifungal. compounds. Mukesh Doble and K. Anil Kumar, *CEJC*, 4(3): 428–439, 2006.
- *A Catalytic Spectrophotometric Determination of Platinum (IV)*, S. Jagadeeswara Rao, K. Anil Kumar, S. Ramasubramanian and R. Sai Sathish, *Proceedings of A.P. Akademi of Science*, Vol. 9,4, pp. 355-358, 2005.
 - A new phorbol diester from *Aleurites moluccanna*, K. Anil Kumar, P. Satyanarayana, G. Nageswara Rao & Sanjay K. Singh, *Fitoterapia*, 72(1): 304, 2001.
 - Constituents of the flowers of *Persea gratissimma*, Anil Kumar. K., Krishnaswamy. N. R., *Fitoterapia*, 71(1): 94, 2000.
 - Biotransformations of 4-methyl umbelliferone derivatives – fungal mediated o-dealkylations, K. Anil Kumar, B. S. Vijay Kumar, B. Laxminarayana & S. Anantahanarayanan, *Studies in Surface science*

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	<p><i>and catalysis</i> 113, Ed. T. S. Prasada Rao & G. Murali Dhar, Elsevier Science B. V., Amsterdam, 541, 1998.</p> <ul style="list-style-type: none"> ➤ Serum amino acid profile in chronic renal failure – K. Anil Kumar, V. Siva Kumar, Anand Solomon, <i>Ind. J. Neph.</i>, 8(2): 52, 1998. ➤ Para-hydroxy hippuric acid – an alternate marker of renal failure in chronic renal failure– K. Anil Kumar, V. Siva kumar, <i>Ind. J. Neph.</i>, 6(2): 40, 1998. ➤ Serum indoxyl sulphate in chronic uraemics – K. Anil Kumar, V. Siva Kumar & S. Kishore Babu, <i>Ind. J. Neph.</i>, 8(3): 85, 1998. ➤ Antifungal activity of 2-thioureidobenzimidazole and some of its derivatives – K. Anil Kumar, B. S. Vijay Kumar, A. V. Lakshminarasimham & C. N. Sunderesan, <i>J. Microb. Biotechnol.</i>, 9(1): 42, 1994.
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Patents:

Match	Document	Document Title
1	WO/2017/002133A1, PCT/IN2016/050045,	Kumar, Anil; Saikat, Roy; Meshiya, Bhargav; Barhalikar, Ravindra; Reddy, Satyanarayana; A nutraceutical formulation and a process for production therof (Curcumin and sugars formulations), Tata Chemicals Limited.
2	WO/2017/002134A1, PCT/IN2016/050044	Kumar, Anil; Saikat, Roy; Meshiya, Bhargav; Barhalikar, Ravindra; Reddy, Satyanarayana, A nutraceutical formulation and a process for production therof (Curcumin and Epigallocatechin gallate formulations), Tata Chemicals Limited
3	WO/2017/002135A1, PCT/IN2016/050043	Kumar, Anil; Saikat, Roy; Meshiya, Bhargav; Barhalikar, Ravindra; Reddy, Satyanarayana A nutraceutical formulation and a process for production therof (Curcumin and Oligosaccharide formulations), Tata Chemicals Limited.
4	WO/2012/090225A3	<p><u>NOVEL COCRYSTALS / MOLECULAR SALTS OF METFORMIN WITH OLEOYLETHANOLAMIDE AS AN EFFECTIVE ANTI-DIABETIC + ANTI- OBESITY AGENT</u></p> <p>The present invention discloses novel synergistic pharmaceutical co-crystals of Metformin or its pharmaceutically acceptable salts and oleoylethanolamide in fixed stoichiometric ratio at lower...</p>
5	WO/2011/051974A1	<p><u>METFORMIN AND A-AMINO ACIDS</u></p> <p>Disclosed herein is a synergistic pharmaceutical co-crystal composition of Metformin and at least one alpha amino acid(s).</p>
6	WO/2012/090224A1	<p><u>NOVEL COCRYSTALS / MOLECULAR SALTS OF MESALAMINE TO BE USED AS IMPROVED ANTI-INFLAMMATORY DRUG</u></p> <p>The present invention provides a novel synergistic pharmaceutical co-crystal of Mesalamine or its pharmaceutically acceptable salts as API along with coformers such as alpha amino acids, flavones...</p>
7	WO/2012/090225A2	<p><u>NOVEL COCRYSTALS / MOLECULAR SALTS OF METFORMIN WITH OLEOYLETHANOLAMIDE AS AN EFFECTIVE ANTI-DIABETIC + ANTI- OBESITY AGENT</u></p> <p>The present invention discloses novel synergistic pharmaceutical co-crystals of</p>

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		Metformin or its pharmaceutically acceptable salts and oleoylethanolamide in fixed stoichiometric ratio at lower...
8	WO/2009/136408A1	<p><u>SYNERGISTIC PHARMACEUTICAL COCRYSTALS</u></p> <p>The present invention discloses synergistic pharmaceutical co crystals comprising soluble forms of broad-spectrum fluoroquinolone antibacterial agents namely Ciprofloxacin and Norfloxacin with...</p>
9	WO/2009/136408A4	<p><u>SYNERGISTIC PHARMACEUTICAL COCRYSTALS</u></p> <p>The present invention discloses synergistic pharmaceutical co crystals comprising soluble forms of broad-spectrum fluoroquinolone antibacterial agents namely Ciprofloxacin and Norfloxacin with...</p>
10	WO/2010/134085A1	<p><u>PHARMACEUTICAL CO-CRYSTALS OF QUERCETIN</u></p> <p>Disclosed herein is synergistic pharmaceutical co-crystals composition comprising Quercetin and an antidiabetic agent(s) as combination drug that have unique physical properties and biological...</p>
11	US20120129923	<p><u>PHARMACEUTICAL CO-CRYSTALS OF QUERCETIN</u></p> <p>Disclosed herein is synergistic pharmaceutical co-crystals composition comprising Quercetin and an antidiabetic agent(s) as combination drug that have unique physical properties and biological...</p>
12	US20120258170	<p><u>PHARMACEUTICAL CO-CRYSTALS OF QUERCETIN</u></p> <p>A co-crystal composition comprised of Quercetin and at least one antidiabetic agent acts as a combination drug having unique physical properties and biological activity, which differ from both...</p>
13	WO/2022/219643A1	<p><u>NUTRACEUTICAL COMPOSITION COMPRISING MOLECULAR COMPLEX OF LACTOFERRIN AND QUERCETIN ('LACTOCETIN') FOR TREATMENT FOR SARS – COV-2 AND RELATED VIRAL INFECTIONS</u></p> <p>The present invention discloses nutraceutical composition comprising molecular complex of Lactoferrin and Quercetin for use as a prophylactic or in the treatment of early and advanced stage of...</p>
14	EP2432320A4	<p><u>PHARMACEUTICAL CO-CRYSTALS OF QUERCETIN</u></p> <p>Disclosed herein is synergistic pharmaceutical co-crystals composition comprising Quercetin and an antidiabetic agent(s) as combination drug that have unique physical properties and biological...</p>
15	EP2432320A1	<p><u>PHARMACEUTICAL CO-CRYSTALS OF QUERCETIN</u></p> <p>Disclosed herein is synergistic pharmaceutical co-crystals composition comprising Quercetin and an antidiabetic agent(s) as combination drug that</p>

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		have unique physical properties and biological...
16	WO/2019/082207A1	<p><u>ENERGY EFFICIENT SYNTHESIS OF SULPHATE OF POTASH USING AMMONIA AS A CATALYST</u></p> <p>The present invention describes an energy efficient method for the synthesis of Sulphate of Potash (K₂SO₄) from Muriate of Potash (KCl) using ammonia as a catalyst. This energy efficient process...</p>
17	WO/2023/042228A1	<p><u>A SYSTEM AND PROCESS FOR THE PRODUCTION OF NITRIC ACID</u></p> <p>The present invention relates to systems and methods for producing nitric acid, nitrates, salts thereof. The system comprises of a reverse vortex plasmatron configured for operating with a feed...</p>
18	WO/2019/082206A1	<p><u>A SWEETNESS AND TASTE ENHANCEMENT FORMULATION</u></p> <p>The present invention disclosed herein a sweetener formulation for enhancing the sweetness, creating upfront taste profile and mouth fullness of low intensity sweeteners / less sweetening sugars...</p>
19	WO/2019/202615A1	<p><u>PROCESS FOR PRODUCTION OF H₂O₂, METAL PEROXIDES AND RADICALS FROM WATER AND MODULAR UNIT FOR THE PRODUCTION OF THE SAME</u></p> <p>The present invention provides a modular unit for cost effective production process for the hydrogen peroxide and other related radicals / species from water as a starting material. According to...</p>
20	WO/2022/024147A1	<p><u>COMPOSITIONS OF LACTOFERRIN WHEY PROTEIN AND JACKFRUIT SEED POWDER</u></p> <p>The present invention discloses compositions comprising Lactoferrin or whey protein isolate and Jackfruit seed powder as functional food products for prophylactic and or therapeutic care against...</p>
21	WO/2019/193605A1	<p><u>A PROCESS FOR PRODUCTION OF NITRIC ACID</u></p> <p>The invention discloses a green process for producing nitric acid using a pulsed corona plasma nitrogen fixation. In the present invention, air is exposed into plasma conditions in the reactor,...</p>