#### **Curriculum Vitae**

Name: Dr Kammara. Rajagopal

Occupation: Scientist F / Senior Principal Scientist

Office address

Department of Protein chemistry and Technology Central Food Technological Research Institute Mysore

India.

krgopal22@rediffmail.com

### **Educational Qualifications:**

| Name of the degree | University         |
|--------------------|--------------------|
| BScEd              | Mysore             |
| MSc Biotech        | Central University |
| PhD                | IMTECH 2004 March  |

**PhD:** Thesis entitled as "Protein engineering of Streptokinase" under which we were able to develop Clot specific SK as therapeutic protein for thrombolytic therapy.

Postdoctoral Fellow: National Research Council, and Univ. Ottawa, Canada.

#### **Honors and Awards:**

| Fellowship             | Year                           |
|------------------------|--------------------------------|
| DBT for MSc            | 1991-93                        |
| GATE                   | 1993                           |
| CSIR                   | 1994                           |
| BARC krishnandae       | 1994                           |
| DAAD                   | 1999                           |
| NSERC (Postdoctoral)   | 2004-07 (NRC, Ottawa)          |
| Kosef fellowship       | 1997-98                        |
| TWAS Fellow            | 2012                           |
| India-UK partnership   | 2013                           |
| Central Uni. of Kerala | 2016 establishing Biochemistry |
| HOD                    | Department                     |
| CSIR-Technology Award  | 2018                           |
| Brainpool Fellow       | 2019                           |
| MRSB-2021              | Member of Royal Society of     |
|                        | Biological Sciences            |

#### **Professional Experience**

Post-doctoral Experience: During my postdoctoral studies at National research Council,

Ottawa, and University of Ottawa (Dept of Biochemistry, Microbiology and Immunology) Canada from july 2004-07 was able to develop Antigen delivery system for intracellular pathogens. Some of the data generated during the study has been published in reputed journals.

#### **Present Research Interests:**

Development of probiotics, Antimicrobials, Designer Probiotics and recombinant probiotics for therapy.

### Awards:

UK-India partnership awards-2014

Brainpool Fellow- 2019

KOSEF fellow- 1998

TWAS fellow-2013

DAAD fellow-1998

# CSIR-Technology Award-2018

#### **Academic Profile**

### A. Research Publications / Significant contributions:

| SI No. | Authors   | Title of the Paper  | Details   | IF  | Citn |
|--------|---|---|---|-----|------|
| 1      | Rachel A. Luu, Komal<br>Gurnani, Renu<br>Dudani, Rajagopal<br>Kammara, Henk van<br>Faassen, Jean-Claude<br>Sirard, Lakshmi<br>Krishnan and Subash<br>Sad.(2006) | Delayed Expansion and<br>Contraction of CD8+ T<br>Cell Response during<br>Infection with<br>Virulent Salmonella<br>typhimurium. | J Immunol August; 1, 2006, 177 (3) 1516- 1525.        | 4.7 | 82   |
| 2      | KF Siddiqui, M Amir,<br>RK Gurram, N Khan,<br>A Arora, K Rajagopal,<br>Javed Agrewala<br>(2014).  | Latency-Associated Protein Acr1 Impairs Dendritic Cell Maturation and Functionality: A Possible Mechanism of Immune Evasion     | The Journal of infectious diseases 209 (9), 1436-1445 | 7.5 | 26   |

|   |  | by Mycobacterium tuberculosis.  |  |     |    |
|---|--|---|--|-----|----|
| 3 | KF Siddiqui, M Amir,<br>N Khan, G Rama<br>Krishna, JA Sheikh, K<br>Rajagopal, Javed<br>Agrewala (2015).        | Prime-boost vaccination strategy with bacillus Calmette-Guérin (BCG) and liposomized alpha-crystalline protein reinvigorates BCG potency.   | Clinical &<br>Experimental<br>Immunology 181<br>(2), 286-296   | 3.4 | 7  |
| 4 | S Choyam, D Lokesh,<br>BB Kempaiah,<br>Kammara Rajagopal<br>(2015).  | Assessing the antimicrobial activities of Ocins   | Frontiers in<br>Microbiology 6,<br>1034                        | 4.1 | 2  |
| 5 | S Rajashekharan, B<br>Krishnaswamy,<br>Kammara Rajagopal<br>(2017).  | Bifid shape is intrinsic to Bifidobacterium adolescentis  | Frontiers in<br>Microbiology 8,<br>478                         | 4.1 | 2  |
| 6 | S Choyam, AK<br>Srivastava, JH Shin, R<br>Kammara. (2019).   | Ocins for food safety.  | Frontiers in<br>Microbiology 10,<br>1736                       | 4.1 | 1  |
| 7 | Dhanashree Lokesh, Raman Parkesh, and kammara Rajagopal (2018).  | Bifidobacterium<br>adolescentis is<br>intrinsically resistant to<br>antitubercular drugs  | <b>Nature Sci Rep.</b> 8: 11897.                               | 4.2 |    |
| 8 | Vasudha Sundram, Jagpreet S. Nanda, Kammara Rajagopal, Jayeeta Dhar, Anita Chaudhary and Girish Sahni. (2003). | Domain Truncation Studies Reveal That the Streptokinase-Plasmin Activator Complex Utilizes Long Range Protein-Protein Interactions with Macromolecular Substrate to Maximize Catalytic Turnover | Journal of<br>Biological<br>Chemistry.15;<br>278; 30569-30577. | 4.1 | 33 |

# Patents granted (total 19 patents)

| SI  | Pat No. | Title in brief              | Authors    | Filing | Granted | Commerld |
|-----|---------|-----------------------------|------------|--------|---------|----------|
| No. |         |                             |            | date   |         |          |
| 1   | 8143027 | Method of making Pg         | Sahni,     | 2007   | 2012    | Yes      |
|     |         | activator polypeptide with  | Rajesh,    |        |         |          |
|     |         | Clot-specific Streptokinase | Chaiti,    |        |         |          |
|     |         | activity                    | Rajagopal, |        |         |          |

|   |            |   | Deepak,<br>Vasudha,<br>Mahavir   |      |      |                           |
|---|------------|---|--|------|------|---------------------------|
| 2 | 80171362   | Polynucleotide encoding proteins with CSSK activity   | Sahni,<br>Rajesh,<br>Chaiti,<br>Rajagopal,<br>Deepak,<br>Vasudha,<br>Mahavir | 2007 | 2008 | Yes                       |
| 3 | 287660     | Novel CSSK proteins possessing altered Pg activation- characteristics and a process for preparation of said proteins    | Sahni,<br>Rajesh,<br>Chaiti,<br>Rajagopal,<br>Deepak,<br>Vasudha,<br>Mahavir | 2006 | 2007 | yes                       |
| 4 | 7250503    | Nucleic acid molecules encoding CSSK fusion proteins possessing altered PG activation characteristics.                  | Sahni,<br>Rajesh,<br>Chaiti,<br>Rajagopal,<br>Deepak,<br>Vasudha,<br>Mahavir | 2003 | 2007 | yes                       |
| 5 | 7163817    | CSSK proteins possessing altered PG activation characteristic and a process for their preparation.                      | Sahni,<br>Rajesh,<br>Chaiti,<br>Rajagopal,<br>Deepak,<br>Vasudha,<br>Mahavir | 2001 | 2007 | yes                       |
| 6 | 0260598    | Novel CSSK proteins possessing latered pg activation characteristics and a process for the preparation of said proteins | Sahni,<br>Rajesh,<br>Chaiti,<br>Rajagopal,<br>Deepak,<br>Vasudha,<br>Mahavir | 2003 | 2005 | yes                       |
| 7 | 0059921    | Novel CSSK proteins possessing latered pg activation characteristics and a process for the preparation of said proteins | Sahni,<br>Rajesh,<br>Chaiti,<br>Rajagopal,<br>Deepak,<br>Vasudha,<br>Mahavir | 2001 | 2003 | yes                       |
| 8 | 0026NF2019 | A process of preparation of<br>Bacillus antimicrobial<br>peptide useful for Food<br>Industry                            | K.<br>Rajagopal<br>Shilja C  | 2019 |      | Negotiations<br>under way |

## Recent patent:

A process for the preparation of bacillus antimicrobial peptide for food industry. 2019 Mar. Shilja and Kammara. Rajagopal

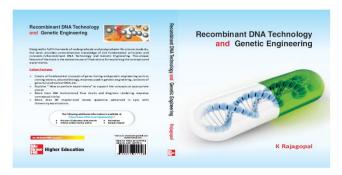
Technologies developed, Licensed and or/ commercialized with details
1. Recombinant Streptokinase: Developed, technology transferred, Licensed and commercialized named as Klot Buster.



- 2. Recombinant Streptokinase Commercialized technology Shasun bio- Chennai
- **3. Clot specific Streptokinase**: Developed, technology transferred to Nostrum Pharmaceuticals, USA for 5 million USD.
- **4.** <u>Bacillus Antimicrobial Peptide Technology</u> (BAMP/ Bug Buster) is ready to transfer, the MNC like Aditya Birla, Intron Life Sciences, and Globion India have already approached and negotiations are under way.

#### **Academic contributions**

A single authored textbook has been published for BSc, BTech, and MSC, Pre-PhD students



#### **Grants**

LSRB, DST, MoFPI (INDIA)

FRGS grant from Malaysia

BBSRC-UK india partnership awards UK

Department of Biotechnology, India

Welcome trust grant in collaboration with Institute of Food Research IFR, Norwich UK.

### **Collaborations**

USM- Malaysia, Institute of food research (IFR-BBSRC)-UK (Prof Arjan narbad) and KNU-korea