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Letter of Reference for Dr. N. V. KrishnaMurthy

I am pleased to submit this letter of commendation in support of the application of my former colleague, a young and bright Dr. N.V. Krishnamurthy (NVK), seeking a post-doctoral position in your lab. I have known NVK ever since he joined BARC's nuclear training school scheme having been his mentor and responsible for his induction into the field of radiolabelled nucleotides and molecular biology. I have followed his scientific career since then, as his secondary supervisor and in recent times mainly as a mentor. I am very much impressed by his professional growth, from strength to strength in terms of his intelligence, research abilities and fruitful contributions. This refers to his individual efforts as well as contributions as a team member of a group of scientists in the radiolabelled nucleotides programme in the Jonaki lab of BRIT.

It is a delight to record the excellent contributions and progress of NVK. He graduated in M.Sc. Chemistry and joined the Nuclear Sciences Training School Course of the Bhabha Atomic Research Centre (BARC), a premier scientific institution in India. After the successful completion (rank: second topper in his batch), he joined the radioisotopes programme in the Board of Radiation and Isotope Technology (BRIT) and was posted to work in the laboratory called, "Jonaki", the lab for radiolabelled biomolecules [co-located in the campus of the Centre for Cellular and Molecular Biology (CCMB)] in Hyderabad. He started his career by studying the on-going practices in the production, testing and utilization of radiolabelled nucleotides, mainly of P-32 and P-33. He quickly mastered the nuances and started making significant refinements and improvements in practically every major step, all towards a better efficient, reliable production processing, as well as in expanding the range of products. He earned considerable appreciation, for his efforts led to much more reliable yields and purity features of the final products. The leading research users in several institutions in turn derived the benefit of these quality products.

Thanks to his excellent experience in both chemistry and biology, he got the opportunity to join the R&D team looking for DNA detection methodologies based on fluorescence and chemiluminescence. In continuation of his research and development work along the above lines, the theme and scope for his PhD project was chosen. His Thesis work titled "Synthesis of a few chemiluminescent probes and their application as bioconjugates" was based on the synthesis, spectral characterisation and application of a chemiluminescent label and its biotin derivatives.

His knowledge and expertise in organic chemistry helped contribute to the various phases of synthesis of reagents, precursors and radiolabelling of bio-molecules. He is very competent with several analytical and instrumental techniques including HPLC, NMR, IR, MS, PCR amongst others. Several citable accomplishments are there from his R&D efforts; just to highlight a few: Development of purification procedure specifically for radiolabelled deoxynucleotides, Synthesis of biotin modified nucleotides, Preparation of streptavidin conjugates and Isolation and purification of luciferase from Indian firefly.

His list of publications, as well as the quality of papers, is rated very good.

Dr. Krishnamurthy is an intelligent, competent scientist capable of significant contributions. He has proven credentials in handling R&D programmes in a professional, systematic manner. He is always singled out among my entire younger colleagues for his sharp intellect, drive and diligence. His ambition to be seized of purposeful, result oriented research pursuit at all times is worthy of special mention. His application for post-doctoral position is therefore strongly recommended for favourable consideration.

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N. Ramamoorthy
Director, Div of Physical and Chemical
Sciences