To.

The Principal

Alva's Institute of Engineering and Technology

Mijar, Moodbidri - 574 225.

Respected Sir.

Sub: Request for Official Duty Leave for collaborative research work

As I informed earlier, I am requesting for on official duty leave for an important research collaboration work between AIET and Kumamoto University (KU), Japan. Our joint research efforts will be on the research topic "Explosive welding of low melting point alloys under various experimental conditions and characterization of their interfacial microstructures"

As you are aware in the year 2017, AIET signed a Memorandum of Understanding (MoU) with Kumamoto University for collaborative research and academic exchanges. Our joint work with Prof. Hokamoto at Japan has shown a promising progress. As a result, it is also planned to use this opportunity to bring collaborative research project under Indo-Japan scheme which will further strengthen our partnership.

To prepare adequately for the project, Dr. Hokamoto has requested for my stay at Kumamoto University for a minimum of 5 months. Therefore, I sincerely request your support in granting me on official duty (OOD) leave from 27th October 2023 to 31st March 2024.

During this period, I will work closely with Dr. Hokamoto and his research team. The outcomes of this collaboration will not only enhance the academic standing of AIET but lead to a quality research publications.

I assure you that I will provide necessary guidance and support to my colleagues to ensure that the responsibilities of department and academic activities continue without any interruption during my absence.

Hence, I kindly request you to consider my request and grant me on official duty leave for 5months.

Thanking you,

Yours Truly

Dr. Satyanarayan Professor and Head.

Dept. of Mechanical Engineering,

Alva's Institute of Engineering and Technology,

Mijar, Moodbidri - 574 225.

Enclosed: KU office letter

Previous best outcomes with KU

I enusurathat per year 2-3

Date: 17-07-2023

analy paper will be published in reputed journals.
Syon (1) (1) (1)

Alva's Institute of Engg. & Technology, Mijur, MOODSIDRI - 574 225, D.K.





## Report on Collaborative Research Between Alva's Institute of Engineering and Technology, India and Kumamoto University, Japan

Dr. Satyanarayan, Professor and Head, Dept.of Mechanical Engineering, Alva's Institute of Engineering and Technology (AIET) visited to Kumamoto University, Japan on then invitation from Dr. Kazuyuki Hokamoto, Professor in the Department of Institute of Industrial Nanomaterials (IINA), Kumamoto University, Japan for collaborative research work.

Dr. Satyanarayan was actively involved in the Research collaboration project on "Explosive welding of low melting point alloys under various experimental conditions and characterization of their interfacial microstructures" from 1<sup>st</sup> November 2023 to 31<sup>st</sup> March 2024.

He has visited different research laboratories and interacted with Professors and Students in Kumamoto University, Japan for the benefits of exchange program between AIET and KU.

He also actively participated in 354<sup>th</sup> Plastic Processing Symposium on "*Current status and prospects of extreme material creation and processing technology*" - The world of processing using impact, ultra-high speed, and ultra-high pressure organized by the Department of Institute of Industrial Nanomaterials (IINA), Kumamoto University, Japan.

He has published a book chapter in collaboration between AIET and KU. The details of the book chapter is as follows

Kambeyanda Rahul Machaiah, Satyanarayan, Shigeru Tanaka Daisuke Inao and K. Hokamoto "Underwater Explosive Welding of Tin and Nickel Plates and Characterization of Their Interfaces" Book: Advanced Joining Technologies, (Taylor & Francis, CRC Press), 1st Edition, 13 March 2024, eBook ISBN9781003327769, Pub. Location: Boca Raton, https://doi.org/10.1201/9781003327769







Dr. Satyanarayan at the main building of Kumamoto University (KU) and with UG and PG students of KU in research laboratory



Dr. Satyanarayan with Dr. Shuichi Torii, Professor & Asst. Director (Former), and Dr. (Mrs) Mitsuyo Kishida, Professor and Vice-Director, Global Joint Education Center for Science and Technology (GJEC), Kumamoto University



Dr. Satyanarayan with Dr. Kazuyuki Hokamoto, Professor, Dept. of ME/IINa, and Dr. G.Anandha babu, Researcher, International Research Organization for Advanced Science and Technology (IROAST), Kumamoto University



Dr. Satyanarayan with the organizers and pariciants of 354th Plastic Processing Symposium at Kumamoto University, Japan

PRINCIPAL

PRINCIPAL

Alva's Institute of Engg. & Technology,

Mijor. MOODBIDRI - 574 225, D.K