

Memorandum of Understanding

between



KARNATAKA GOVERNMENT RESEARCH CENTER

of

SAHYADRI

COLLEGE OF ENGINEERING & MANAGEMENT

ADYAR, MANGALORE -575 007

and



MANGALORE UNIVERSITY,

MANGALAGANGOTRI, KONAJE, MANGALORE – 574 199

for

**Collaborative Research and
Development, Education, and Training**

on

20th February, 2015

1. Purpose and Objectives:

1.1. Purpose. This Memorandum of Understanding (MoU) establishes the framework for collaborative research and development (R&D), and training efforts (hereafter called "collaboration") between Karnataka Government Research Centre, Sahyadri College of Engineering and Management, Adyar, Mangalore-575007 (hereafter called "KGRCS"), Mangalore, affiliated to Visvesvaraya Technological University, Belgaum, Karnataka and Mangalore University, Mangalagangothri, Konaje, Mangalore (hereafter called "MU").

Collaborations under this MoU are focused on, but not limited to, R&D work in projects relevant to composite materials, structural engineering (dynamics, design auditing and testing), material testing and visiting faculty or R&D assignments, M.S., M.Tech., Ph.D. programs, short-term training, and short-term courses. The MOU is intended to expedite R&D of new methods and technologies that can be implemented in support of MU and KGRCS missions as well as authorized organizations to enhance technological capabilities, skilled human resources and economic growth. It is also aimed at enhancing the quality of research and teaching at KGRCS and MU.

Both KGRCS and MU believe that this collaboration will contribute to more efficient resource utilization, avert or minimize duplication, and accelerate education methods and technology advancement in critical areas in science and engineering. The two organizations further believe that successful collaboration will leverage beneficial results via method and technology transfers to industry, education, and training programs (including those for future entrepreneurs).

1.2. Objectives. KGRCS and MU will work collaboratively to expedite the development of methods and technologies that are needed to address critical research needs of the industry improving interaction between educational institutions and Industry as envisaged by monitoring agencies like UGC and AICTE.

i. Identify methods and science/technology needs, formulate research and development projects collaboratively that address technology needs, and establish arrangements that describe how personnel and resources of KGRCS and MU will be effectively utilized to perform research and development projects addressing these needs (such as projects involving materials characterization, marine technology and biotechnology issues).

ii. Perform in an expeditious manner collaborative research and development projects.

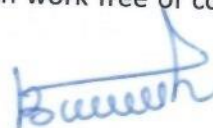
iii. Provide products from the research and development projects in a form and format that can be easily used and understood by high technology and other industries which could result in social benefits and commercial applications.



2. Responsibilities:

2.1 Karnataka Government Research Centre, Sahyadri and Mangalore University, Mangalore agree to:

- i) Jointly identify project areas and topics, and prepare and submit project proposals to established funding agencies in the country.
- ii) Implement research programs in their respective facilities and mutually cooperate in developing educational and training programs of relevance and mutual interest.
- iii) Permit their respective faculty members to mutually guide M-Tech and Ph.D. research programs and activities in their organizations.
- iv) Make all the necessary provisions to utilize the related research laboratories and other facilities in their respective organizations. Projected costs for internal and external services will be included in all proposals, if required.
- v) Organize and conduct continuing education (CE) and short-term certification courses in their respective organizations and in their respective domains of expertise for professional development of industry employees/personnel, future entrepreneurs, and Science and Engineering faculty.
- vi) Participate in joint technical activities (e.g., technical inspections, workgroups, scientific or engineering panels, paper preparation and presentation, workshops, conferences, etc.) with representatives from KGRCS, MU, and other organizations to provide technical advice and guidance on issues related to research needs. Both institutions shall collaborate with each other in conducting National and International level seminars, conferences, and symposiums.
- vii) Be in contact and prepare an annual report of all their conducted collaborative activities which will include both technical and financial summaries.
- viii) Work together to exchange information consistent with research considerations and identify areas of collaboration, development; formulate, and submit proposals of interest singly or jointly with MU or KGRCS to NAL, SERC, DST, DIT, DBT, DRDO, CSIR, ISRO, DAE (BRNS), UGC AICET, VGST and national laboratories (such as R&D projects, technology assessments, testing, calibration, and consultancy); carry out such sponsored projects; and describe specific R&D projects, education activities, and training programs that will be jointly pursued by KGRCS and MU for mutual benefit.
- ix) Facilitate M. Tech. or Ph.D. programs of qualified MU or KGRCS (SCEM) employees in research topics of KGRCS or MU expertise. The Guide/Major Advisor shall be from MU or KGRCS for each such program. A co-guide may be assigned from the alternate MoU party.
- x) Facilitate each other facilities for conducting such research work free of cost or based on mutually agreed rate wherever required.



xii) Make provisions for KGRCS or MU faculty members as Visiting Faculty at KGRCS or MU for limited durations if need arises such that the faculties will get their salary and other benefits from their respective organizations.

xiii) Assign a Management Points of Contact (MPC) and Technical Leads (TL) for interactions between MU and KGRCS on all major collaborative grants or activities.

xiv) Provide, in cooperation with MU and KGRCS MPC, an annual executive summary report on the progress made under this MoU for each of the collaborations, or other cooperative activities, that are developed as part of this agreement (MoU).

xv) Record, produce and maintain minutes of meeting as described in this MoU.

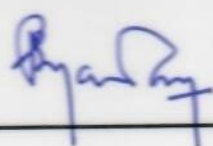
3. Memorandum of Understanding (MoU) Administration:

3.1 Reports. The status of work performed under this MoU will be reviewed on a quarterly and annual basis. The MU or KGRCS will take the lead for specific research projects and be responsible for organizing meetings (planning half yearly meetings and annual meetings), developing agenda and recording results of the meetings. Minutes of the meetings will be produced by KGRCS or MU and be distributed to participants of the meeting as well as to the Directors and concerned authorities. A central file (retained by MU or KGRCS) will be maintained.

3.2 Information Releases: Director of Research, KGRCS and the designated authority from MU will jointly review and approve information regarding MoU activities (meetings, new developments, etc.) prior to public release. Reports prepared under this agreement will stipulate specific procedures for the coordination, handling and public disclosure of information. All information disclosures concerning activities under this MoU or subsequent reports will comply with MU and KGRCS regulations governing the release of information. Where particular information protocols apply to a particular laboratory, or network of laboratories, those protocols will be explained in advance of the start of work and be followed by both parties to this MoU.

3.3 Facility Security, Health, Safety, and Environmental Compliance: The host facility's security, health, safety, and environmental compliance programs will be followed by all personnel when engaged in work activities as outlined in this MoU. Should an employee be injured in the course of doing their duties, workers injury claims shall be covered by the employee's agency. Student related injuries, occurring during the course of research, shall be handled by the institution where the injury occurred. All injuries must be reported to MPC's within 2 hours.

3.4 Reimbursement Policy: Each party to this agreement will handle and expend its own funds allocated as per the research proposal grant, except as otherwise noted in this MoU. The responsibilities assumed by each party are contingent upon funds being available from which expenditures legally may be met.



3.5 Annual Management Meetings: KGRCS and MU will meet annually to plan and coordinate collaborations under this MoU. Such meetings will be held at a mutually agreed upon location and on a date that is compatible with the planning and budgeting cycle of each organization. At this meeting, recommendations for adjustments to current activities, projects, and budget priorities will be proposed and agreed upon by the MPC's for submission to the KGRCS Director (Research) and MU Vice Chancellor for further action.

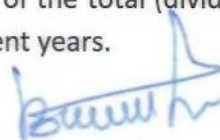
3.6 Technical Lead Responsibilities: Technical Leads (TL) for each project or activity will strive to engage in:

- Providing scientific and technical information exchanges consistent with agency regulations governing the exchange or release of information which will be explained prior to the start of any research.
- Delivering written or verbal scientific and technical evaluations of progress half yearly
- Organizing and participating in scientific/technical workshops and scientist-to-scientist meetings or conferences.
- Reporting to MPC's on any exceptional accomplishments from, or impediments to, successful program or project execution immediately.
- Recommending improvements for the MoU activities

3.7 Approvals: All plans, resources allocations like sharing the facilities and activities design to carry out this MoU shall be agreed to and approved by two parties of this MoU namely, KGRCS and MU prior to commencement of any scientific/technical work.

3.8 Inventions and Licensing: Inventions and Licensing: Activities conducted to carry out this MoU and any project or other extramural arrangements may results in products or processes that are patentable or otherwise proprietary. The principal investigators organization (KGRCS or MU), whose work results in the invention, shall disclose the invention to the other MoU party and then prepare, file, and prosecute patent applications. The cost of the patent application will be borne by the principal investigators organization (KGRCS or MU). If protection is granted, the *inventing organization* will manage the invention in accordance with its rules and regulation. The non-inventing organization will manage the invention in accordance with its rules and regulations. The non-inventing MoU party to this MoU will have licensing right to all patents protected for an annual charge of 1 rupee per year for 20 years. KGRCS and MU can jointly develop a plan to cross-license future patentable improvements to the original patent prior to or at the time the patent is signed/ issued.

Royalties resulting from the licensing of the patent will be given to the inventing institution (KGRCS or MU) with signee's on the patent getting 5% of the total (divided equally amongst the patent signers) for the first year and 3% of the total (divided equally amongst the patent signers) for the second year and subsequent years.



4.2 Period of Agreement:

4.2.1 This MoU shall be effective for **10** years from the date of the last signature unless cancelled in writing by either of the participating organizations with 90 days written notice.

4.2.2 Conflicts that may arise after the MoU is in effect will be resolved by KGRCS and MU MPCs. If conflicts cannot be resolved at this level, then they will be taken to the respective Directors of KGRCS and MU Vice Chancellor. If conflicts cannot be resolved at this level, then the signatory authorities for this MoU will resolve the conflicts either by coming to a written agreement or by amending this MoU.

4.3. This MoU will be reviewed annually by the MPC's or higher management to determine if any changes or amendments should be incorporated. Such changes or amendments will be formally incorporated in the MoU within 30 days of the annual review.

4.4 Within 30 days of its expiry, this MoU may be renewed on same terms as on the date of expiry upon a signed agreement of renewal between the respective signers of KGRCS and MU.

5. Notices:

All notices, requests and other communications under this MoU shall be in writing and shall be deemed to have been duly given and made if addressed and delivered by hand, or by facsimile, or by e-mail to the addresses set forth below (or to such other addresses as may be given by written notice).

Notices to Mangalore University shall be addressed as follows:

Prof. P. S. Yadapadithaya
The Registrar
Mangalore University
Mangalagangothri, Konaje
Mangalore-5750008
Fax: +91-824-2287276
E-mail: registrar@mangaloreuniversity.ac.in

Notices to KGRCS shall be addressed as follows:

Prof. C. Ranganathaiah
Director (Research),
Karnataka Government Research Centre,
Sahyadri College of Engineering & Management,
Sahyadri Campus, Adyar, Mangalore - 575 007
Phone: +91 824 2277222; Fax: +91 824 2277444;
E-mail: research.director@sahyadri.edu.in



6. General Provisions:

6.1. This MoU supersedes any other memorandum of understanding held by either party with regard to the research to be performed.

6.2. This MoU in no way restricts the parties from participating in similar activities or arrangements with other public or private agencies, organizations, or individuals with the exception that any confidential information has to be approved prior to release by both parties.

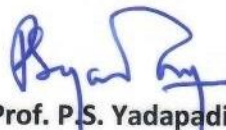
6.3. This MoU describes in general terms, the basis upon which the parties intend to cooperate. It does create binding obligations between the parties until the MoU is dissolved.

**Approved and Accepted for
Karnataka Government Research
Centre at SCEM, Sahyadri**



Signed by: **Prof. C. Ranganathaiah**
Director (Research), KGRCS

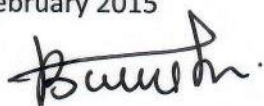
**Approved and Accepted for
Mangalore University, Konaje, Mangalore**



Signed by: **Prof. P.S. Yadapadithaya**
Registrar, MU

Seal: **Registrar**
MANGALORE UNIVERSITY
MANGALAGANGOTRI - 574 199

Date: 20th February 2015



Signed by: **Dr. Umesh M. Bhushi**
Principal, SCEM

Seal:



Date: 20th February 2015

Date: 20th February 2015

**Signed in the presence of Honorable Vice-Chancellor,
Mangalore University
and
The Chairman, Bhandary Foundation**