



SCOTT CHRISTIAN COLLEGE
ESTABLISHED 1893

Dated 6 January 2020

MEMORANDUM OF UNDERSTANDING
BETWEEN
INDIRA GANDHI CENTRE FOR ATOMIC RESEARCH, KALPAKKAM
AND
SCOTT CHRISTIAN COLLEGE (AUTONOMOUS), NAGERCOIL

This **MEMORANDUM OF UNDERSTANDING** (hereinafter called the MoU) is made on the 6th of January 2019 (Monday) between, on the one hand, the President of India represented by **INDIRA GANDHI CENTRE FOR ATOMIC RESEARCH, KALPAKKAM** (hereinafter called **IGCAR** or Client), Kalpakkam 603 102 and, on the other hand, **SCOTT CHRISTIAN COLLEGE (AUTONOMOUS), NAGERCOIL, 629 003** (hereinafter called **SCC**).

WHEREAS,

- (A) **IGCAR** has requested **SCC** to undertake the experimental work related to the “Monitoring of Background Radiation and Radon/Thoron Levels, Natural Radioactivity Distribution and Estimation of Dose to the General Public Residing at the Coastal Belt of High Background Natural Radiation Area (HBNRA) of Manavalakurichi and the Normal Background Natural Radiation Coastal Areas (NBNRA) of Parangipettai and Kalpakkam – A Comparative Study” having represented to **IGCAR** that they have the required professional skills, personnel and infrastructure has agreed to undertake the work on the terms and conditions set forth in this MoU.
- (B) **IGCAR** has received a project proposal from **SCC** outlining the scientific programme to be adopted by **SCC** in order to realize the objectives of “Monitoring of Background Radiation and Radon/Thoron Levels, Natural Radioactivity Distribution and Estimation of Dose to the General Public Residing at the Coastal Belt of High Background Natural Radiation Area (HBNRA) of

Manavalakurichi and the Normal Background Natural Radiation Coastal Areas (NBNRA) of Parangipettai and Kalpakkam – A Comparative Study”.

- (C) **IGCAR** has considered and accepted the project proposal and agreed to make available project costs at actual not exceeding a total sum of Rs.22,17,600/- (Rupees twenty two lakh seventeen thousand and six hundred only) for carrying out this task covered under this MoU.
- (D) It is noted that payment will be made by **IGCAR** in two installments as per the estimates in the Project Report and based on specific requests by **SCC** duly approved by competent authority in **IGCAR** based on achievements of deliverables / milestones given in MoU. Each payment received by **SCC** should be accounted and fund utilization certificate produced while seeking next payment. Such payments will be subject to, in all respects, the terms and conditions of this MoU.

NOW, THEREFORE, the parties hereto agree as follows:

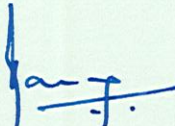
1. The following documents attached hereto shall be deemed to form an integral part of the MoU.
 - a) Conditions of MoU
 - b) Project proposal from **SCC**, and subsequent modifications (see 2(a))
 - c) Following Appendices:
 - Appendix A : Project Coordination Committee
 - Appendix B : Key Personnel
2. The mutual rights and obligations of **IGCAR** and **SCC** shall be as stipulated in the MoU, in particular,
 - (a) **SCC** shall undertake all work described in the project proposal, in accordance with the provisions of the MoU and in accordance with any mutually agreed modifications. Such modifications will be deemed to be a part of the MoU.

(b) **IGCAR** shall make payments to **SCC** in accordance with the provisions of the MoU.


IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names as on the day and year first above written:

FOR AND ON BEHALF OF
PRESIDENT OF INDIA

FOR AND ON BEHALF OF
Scott Christian College (Autonomous), Nagercoil

By 

(Director, SQRMG, IGCAR)

By 

(Principal, SCC, Nagercoil)
**PRINCIPAL
SCOTT CHRISTIAN COLLEGE
(Autonomous)
NAGERCOIL- 629 003**

Signed in presence of
S. Chandrasekaran

Signed in presence of

1. **एस. चंद्रशेखर/S. CHANDRASEKARAN**
प्रधान, विकिरण संरक्षा अनुभाग/Head, Radiation Safety Section
स्वास्थ्य एवं औद्योगिक संरक्षा प्रभाग
Health & Industrial Safety Division
आरईएसजी, एचएसईजी, इगाअपके, पऊवि, कल्पाक्कम
RESG, HSEG, IGCAR, DAE, Kalpakkam - 603 102.

2. V. Subramanian
डॉ. वी. सुब्रमणियन/Dr. V. SUBRAMANIAN
प्रधान, विकिरण अनुप्रयोग एवं निगरानी अनुभाग
Head, Radiation Application & Monitoring Section
विकिरण एवं पर्यावरणीय संरक्षा प्रभाग
Radiological & Environmental Safety Division
आरईएसजी, एचएसईजी, इगाअपके, पऊवि, कल्पाक्कम
RESG, HSEG, IGCAR, DAE, Kalpakkam - 603 102.

1. Shirley Daniel
SHIRLEY DANIEL
ASSISTANT PROFESSOR IN ZOOLOGY
SCOTT CHRISTIAN COLLEGE (AUTONOMOUS)
NAGERCOIL- 629 003.

2. Jeben Benjamin
JEBEN BENJAMIN
DEPARTMENT OF ZOOLOGY
SCOTT CHRISTIAN COLLEGE (AUTONOMOUS)
NAGERCOIL- 629 003

CONDITIONS OF MoU

1. GENERAL PROVISIONS

1.1. Definitions:

Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings.

- a] “**Applicable Law**” means the laws and any other instruments having the force of law in India as they may be issued and in force from time to time.
- b] “**Party**” means **IGCAR** and **SCC** as the case may be and “**parties**” mean both of them.
- c] “**MoU**” means the MoU signed by the Parties, together with all the documents listed in Clause 1 of such signed Contract.
- d] “**Effective Date**” means the date on which this Contract comes into force and effect pursuant to Clause 2.1.
- e] “**Government**” means the Government of India.
- f] “**Personnel**” means persons engaged / employed by **SCC**.
- g] “**Experimental work**” means all work to be performed by the Principal Investigator (PI) pursuant to this Contract for the purposes of the Project, as described in the Project Proposal.
- h] “**Third Party**” means any person or entity other than **SCC**.

1.2. Relation between the Parties:

Nothing contained herein shall be construed as establishing a relation of master and servant or of agent and principal between **IGCAR** and the PI. Subject to this MoU, **SCC** have to take complete charge of their personnel performing the work and shall be fully responsible for the work performed by them or on their behalf, hereunder.

1.3. Law Governing the MoU:

This MoU, its meaning and interpretation, and the relation between the parties shall be governed by the Applicable law.

1.4. Notices:

1.4.1. Any notice, request or consent required or permitted to be given or made pursuant to this MoU shall be in writing. Any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent by Registered Mail, Telex, Telegram or facsimile to such Party at the address specified.

1.5. Taxes & Duties:

SCC shall pay such taxes and duties or fees and other impositions as may be levied in the applicable law. These will be deducted at source as per relevant rules/ laws. Taxes in the nature of service tax if any included in the MoU and paid by SCC shall be reimbursed subject to documentary evidence of registration and payment of the same.

2. COMMENCEMENT, COMPLETION, MODIFICATION AND TERMINATION OF MoU

2.1. Effectiveness of MoU:

This MoU shall come into force and effect on the date stipulated in IGCAR's notice to SCC to begin carrying out the work, and the MoU will be for a period of Two years from the date and shall be renewed for further periods, if any after review and upon mutual consent by both the parties.

2.2. Termination of MoU for Failure to Become Effective:

If this MoU has not become effective within such time period after the date of the MoU signed by the Parties, either Party may, by not less than Four [4] Weeks' written notice to the other Party, declare this MoU to be Null and Void, and in the event of such a declaration by either Party, neither Party shall have any claim against the other Party with respect hereto.

2.3. Commencement of the work:

SCC shall begin carrying out the work at the end of such time period after the effective date as shall be specified in the notice issued as per Clause 2.1.

2.4. Expiration of MoU:

Unless terminated earlier pursuant to Clause 2.9. hereof, this MoU shall expire when all work have been completed and all payments have been made as

specified in the Project Proposal, or at the end of such period after the Effective date as specified in the notice under 2.1.

2.5. Entire Agreement:

This MoU contains all covenants, stipulations and provisions agreed by the Parties. No Agent or representative of either Party has authority to make, and the Parties shall not be bound by or be liable for any statement, representation, promise or agreement not set forth herein.

2.6. Modification:

Modification of the Terms and Conditions of this MoU, including any modification of the scope of the Work, may only be made by written agreement between the Parties based on mutual consent/Consensus.

2.7. Force Majeure:

2.7.1. Definition:

a] For the purpose of this MoU, "Force Majeure" means an event which is beyond the reasonable control of a party, and which makes a party's performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the circumstances, and includes but is not limited to war, riots, civil disorder, earthquake, fire, explosion, storm, flood or other adverse weather conditions, strikes, lockouts or other industrial action [except where such strikes, lockouts or other industrial action are within the power of the party invoking Force Majeure to prevent], confiscation or any other action by Government agencies.

b] Force Majeure shall not include

- [i] Any event which is caused by the negligence or intentional action of a Party or such a Party's coworkers or agents or Employees
- [ii] Any event which a diligent party could reasonably have been expected to both
- [iii] Taking into account at the time of the conclusion of this MoU and avoid or overcome in the carrying out of its obligations hereunder.
- [iv] Force Majeure shall not include insufficiency of funds or failure to make any payment required hereunder.

2.7.2 No Breach of Contract:

The failure of a Party to fulfill any of its obligations hereunder shall not be considered to be a breach of, or default under, this MoU in so far as such inability arises from an event of Force Majeure, provided that the Party affected by such an event has taken all reasonable precautions, due care and reasonable alternative

measures, all with the objective of carrying out the terms and conditions of this MoU.

2.7.3 Consultation:

Not later than thirty [30] days after SCC have become unable to perform a material portion of the work, as the result of an event of Force Majeure, the Parties shall consult each other with a view to agreeing on appropriate measures to be taken in the circumstances.

2.8. Suspension:

IGCAR may, by written notice of suspension to SCC suspend all Payments to SCC hereunder if SCC fails to perform any of their obligations under this Contract, including the carrying out of the work, provided that such notice of Suspension

- [i] Shall specify the nature of the failure and
- [ii] Shall request SCC to remedy such failure within a period not exceeding thirty days 30 days after receipt by SCC of such notice of suspension.

2.9. Termination:

2.9.1. By IGCAR:

IGCAR reserves the right to terminate the MoU by giving not less than 30 days notice of termination to SCC

- a] If the Review Committee [See Appendix A] reports unsatisfactory progress in the work programme and recommends termination of the MoU.
- b] If SCC fails to comply with any final decision reached as a result of arbitration proceedings pursuant to Clause 6.2. hereto.
- c] If SCC is unable to take up the programme for a period of not less than 60 days from the effective date.
- d] If IGCAR in its sole discretion decides to terminate the contract.

2.9.2. By SCC may terminate this Contract by giving not less than 30 days written notice to IGCAR.

- a] If IGCAR fails to make payments SCC pursuant of this Contract and not subject to disputes.

- b) If, as a result of Force Majeure, SCC is unable to perform the work programme for a Period of not less than 60 days.
- c) If IGCAR fails to comply with any final decision reached as a result of arbitration pursuant to Clause 6.2.

2.9.3. Cessation of Rights and Obligations:

Upon termination of this Contract pursuant to Clauses 2.2. or 2.9. Hereof, or upon expiration of this Contract pursuant to Clause 2.4. Hereof, all rights and obligations of the Parties hereunder shall cease, except;

- a) such rights and obligations as may have accrued on the date of termination or expiration.
- b) the obligation of confidentiality set forth in Clause 3.2. hereof.
- c) any right which a Party may have under the Applicable Law.

2.9.4. Cessation of the project:

Upon termination of this MoU by notice of either Party to the other pursuant to Clause 2.9.1. or 2.9.2. hereof, SCC shall, immediately upon dispatch or receipt of such notice, take all necessary steps to bring the Services to a close in a prompt and orderly manner and shall make every reasonable effort to keep expenditures for this purpose to a minimum. With respect to documents prepared by SCC and equipment and materials furnished by IGCAR, SCC shall proceed as provided, respectively, by Clauses 3.2. or 3.4. hereof.

2.9.5. Milestones and deliverables

Installment/ Phase	Payment & Deliverables	Amount (Rs)
I.	I installment at the time of implementation .	9,98,800
II.	II installment upon submission of the following documents 1. Utilization Certificate certified by a chartered accountant and the Principal 2. A brief report of the progress of work during the first year. 3. Appointment orders of the Project staff.	12,18,800
Total		22,17,600

2.9.6. Payment upon Termination:

Upon termination of this MoU pursuant to Clauses 2.9.1. or 2.9.2. hereof, **IGCAR** shall make the following payments to **SCC** after offsetting against these payments any amount that may be due from **SCC** to **IGCAR**;

- a] remuneration pursuant to Clause 5 hereof for satisfactorily work performed prior to the effective date of termination.
- b] Reimbursable expenditure pursuant to Clause 5 hereof for expenditure actually incurred prior to the effective date of termination and
- c] Except in the case of termination pursuant to paragraph [a] through [d] of Clause 2.9.1. hereof, reimbursement of any reasonable cost as decided by **IGCAR** incident to the prompt and orderly termination of the Contract.

2.9.6.1. Where advance payments have been made by **IGCAR** to **SCC** in respect of the Contract, upon the termination of the MoU, any balance amount of money available with **SCC**, after accounting for the expenditure, till the date of termination, subject to 2.9.5. [c], shall be returned forthwith to **IGCAR**.

3. OBLIGATIONS OF SCC

3.1. General:

3.1.1. Standard of Performance:

SCC shall perform the work and carry out their obligations hereunder with all due diligence, efficiency and economy, in accordance with generally accepted professional technique and practices, and shall observe sound management practices, and employ appropriate advanced technology and safe and effective equipment, machinery, materials and methods. **SCC** shall always act, in respect of any matter relating to this Contract or to the work, as faithful advisers to **IGCAR**, and shall at all times support and safeguard legitimate interests of **IGCAR**, in any dealings with third Parties.

3.1.2. Review of Progress:

The Progress of the work undertaken as part of the MoU will be reviewed by a Committee consisting of Senior Members from both the Parties, as well as a few eminent Scientists from outside **IGCAR**. The Composition of this Review Committee appears in Appendix "A". The PI shall provide a report of the Progress of work to the Review Committee. The Review Committee shall meet once in six months. The Review Committee may suggest modification in the funding pattern based on the review of the Progress, subject to the ceiling of total quantum of funding as provided in the Project

Report duly approved and accepted by **IGCAR**. The decision of the Review Committee will be binding on both the Parties.

3.2 Confidentiality and Reporting:

The data generated in the Research Programme taken up as part of the MoU will be presented in Symposia / Conferences etc., or published as Reports / Journal publications etc., only after mutual discussion between the parties. Any publications arising out of the work to be opened as part of this project will be jointly authored. The decision about the publication of the results will also be taken jointly by the parties. All the Intellectual Property Rights [Patents, Copyrights etc. arising out of the work carried out as part of the Contract, shall be the owned jointly by **SCC** and **IGCAR**. Principal Investigator, **SCC** and Director, **IGCAR** shall mutually agree on equitable sharing of any income accruing from Premia, License Fee, and Royalty etc. at the appropriate time. **IGCAR** shall reserve the right to hold from publication any data that in its view could be of strategic importance. The decision of **IGCAR** in the matter of publication will be binding on **SCC**.

SCC will provide half yearly report on the progress made in the project for review by Review Committee. In addition, at the end of the project, a consolidated report on the achievements of the project as well as summary of the expenditure will be provided by **SCC** to **IGCAR**.

3.3 Accounting, Inspection and Auditing:

SCC shall separately maintain and provide a yearly account of expenditure incurred in the Project. An audited account of the expenditure on the Project and a Certificate of Utilization signed by the Appropriate Authority will also be provided at the end of every one year from the date of effectiveness of the Contract. The following guidelines will be followed in preparing the Statement of Accounts:

- 3.3.1. The expenditure will be listed against each major head mentioned in the project proposal. The expenditure will be contained with-in the allocation object head-wise as per actual expenditure incurred by **SCC** for this project. The Over-head Charges will be as per accepted norms only.
- 3.3.2. Items costing more than Rs. 25,000/- will be listed separately, items costing less Rs. 25,000/- will be suitably grouped and listed. Where the cost of individual item of expenditure exceeds Rs. 1.0 lakh, the original receipts for the purchase shall be produced along with the expenditure statement.

3.4 Equipment and Materials procured by SCC:

All equipments procured by **SCC** out of the funds provided by **IGCAR** for the purpose of carrying out the project will be considered as a property of **IGCAR**. Upon termination or expiration of the MoU, **SCC** shall make available to **IGCAR** the inventory for such equipment and materials and shall return all the equipments

to **IGCAR** or dispose off these equipment and materials in accordance with the instructions from **IGCAR**.

4. PERSONNEL INVOLVED IN THE PROJECT

4.1. General:

SCC shall employ and provide such Qualified and experienced personnel as are required to carry out the project as per the norms stipulated by **SCC**.

4.2. Description of Personnel:

The Names, Qualifications and Job Description of the Personnel who will be involved in the Project from both the Parties are described in Appendix "B". **SCC** shall employ temporary additional staff [Research Associates [RA], Junior Research Fellows [JRFs etc.] as per the Project Proposal and as per the terms and conditions of the Contract.

4.3. Recruitment of Temporary Additional Staff:

The temporary Additional Staff [RA, JRF etc.] to be recruited for carrying out the project shall meet the **SCC** norms. The selection of these staff will be carried out through Notifications, Written Test, Interview and other Procedures as applicable in the case of **SCC**.

4.4. Remuneration to be paid to these staff shall be as per **SCC, subject to the terms of the MoU.**

5. OBLIGATIONS OF IGCAR

In consideration of the work performed by **SCC** under this Contract, **IGCAR** shall make such payments and in such a manner as has been given below:

5.1. The total amount payable to **SCC**, shall not exceed a sum of Rs. 22,17,600/- (Rupees twenty two lakh seventeen thousand and six hundred only).

5.2. **IGCAR** will extend all possible support to the successful execution of the project, by way of extending its infrastructural facilities such as Library, on a chargeable basis where necessary.

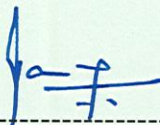
6. SETTLEMENT OF DISPUTES

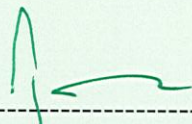
6.1. Amicable Settlement:

The Parties shall use their best efforts to settle amicably all disputes arising out in Connection with this MoU or the Counterproductive thereof.

6.2. Dispute Settlement / Arbitration:

Any disagreement/difference of opinion/dispute regarding the interpretation of the provisions of this MoU shall be resolved by mutual consultation by the signatories. For any dispute unresolved, reference shall be made under the provisions of the Arbitration and Conciliation Act, 1966 or any statutory modification/re-enactment thereof and rules made there under. No payment to SCC shall be withheld pending resolution of any differences of opinion, unless such payment is the subject of dispute. The place of arbitration shall be Mumbai and the proceedings shall be conducted in English language. Chairman, Atomic Energy Commission (AEC) or his nominee will be the arbitrator. The award of the arbitrator shall be binding on both the parties.

By -----
(Director, SQRMG, IGCAR)

By -----
(Principal, SCC)

**PRINCIPAL
SCOTT CHRISTIAN COLLEGE
(Autonomous)
NAGERCOIL- 629 003**

Appendix A

Project Coordination Committee (PCC)

The PCC will involve itself in the formulation of broad policies and technical programmes in line with the objective of this MoU. The PCC will meet at least once a year to monitor the progress of projects under the MoU. The composition of the PCC would be as follows:

i.	Dr. B.Venkatraman Distinguished Scientist, Director, SQRMG IGCAR, Kalpakkam	Chairman
ii.	The Principal Scott Christian College (Autonomous) Nagercoil	Co-Chairman
iii.	Dr. R. Venkatesan Head, RESD, HSEG IGCAR, Kalpakkam	Member
iv.	Dr. V. Subramanian Head, RAMS, RESD, HSEG IGCAR, Kalpakkam	Member
v.	Shri S. Chandrasekaran Head, RSS, HISD IGCAR, Kalpakkam	Member
vi.	Shri S. Bala Sundar RAMS, RESD, HSEG IGCAR, Kalpakkam	Coordinator

Appendix B

Key Personnel:

SCC

- 1. Dr. J. Robert Victor Edward** **Chairman**
Principal
Scott Christian College (Autonomous)
Nagercoil
- 2. Dr. S. Godwin Wesley** **Principal Investigator**
Department of Zoology
Scott Christian College (Autonomous)
Nagercoil
- 3. Dr. V. Robin Perinba Smith** **Co-investigator**
Head, Department of Zoology
Scott Christian College (Autonomous)
Nagercoil

IGCAR

- 1. Dr. B. Venkatraman** **Chairman**
Distinguished Scientist,
Director, SQRMG
IGCAR, Kalpakkam
- 2. Shri S. Chandrasekaran** **Member**
Head, RSS, HISD
IGCAR, Kalpakkam
- 3. Shri S. Bala Sundar** **Member**
RAMS, RESD, HSEG
IGCAR, Kalpakkam