

381

Application No.: **Recurring**  
Agri/2015/69

**No. BT/PR16867/NER/95/327/2015**  
GOVERNMENT OF INDIA  
MINISTRY OF SCIENCE & TECHNOLOGY  
DEPARTMENT OF BIOTECHNOLOGY  
(NER-BPMC)

Block 2, (6-8th Floors)  
CGO Complex, Lodhi Road,  
New Delhi- 110 003

Date: 13/11/2018

**RELEASE ORDER**

In continuation of this Department's sanction order of even number dated Jan 13, 2017 sanction of the President is hereby accorded, under Rule 18 of the Delegation of Financial Powers Rule, 1978, for the release of Rs. **3194000.00** (Rupees Thirty One Lakhs Ninety Four Thousand Only) being the second year release for the project entitled "**Integrated approach to understand agarwood formation and value addition of Agarwood (Aqualaria malaccensis)**", being implemented by

1. Prof. Ashish Kumar Nandi, Jawaharlal Nehru University, Room No. 415, New Delhi - 110067
2. Dr. Bimal Debnath, Tripura University, Suryamaninagar, Agartala - 799022, Tripura
3. Dr. Madhumita Barooah, Assam Agricultural University, Jorhat - 785004, Assam
4. Dr. Phatik Tamuli, Darrang College, Tezpur - 784001, Assam
5. Dr. Sofia Banu Banu, Gauhati University, Gopinath Bordoloi Nagar, Guwahati Assam - 781014

The detailed break-up is as given below:

SNo	Institute Name	Recurring						Total Release Amount (Rs)
		Manpower	Consumable	Travel	Contingency	Others	Overhead	
1	Assam Agricultural University	255000.00	399000.00	24000.00	20000.00	0.00	33000.00	731000.00
Interest earned of rs. 17000 assuming 4 percent on rs. 411000 is re appropriated to overhead								
2	Darrang College	208000.00	136000.00	33000.00	6000.00	0.00	4000.00	387000.00
Interest earned of rs. 6000 assuming 4 percent on rs. 152000 is re appropriated to overhead balance under NR head is re appropriated to contingency								
3	Gauhati University	187000.00	900000.00	40000.00	25000.00	0.00	48000.00	1200000.00
Interest earned of Rs. 2000 is re appropriated to overhead								
4	Jawaharlal Nehru University	192000.00	250000.00	25000.00	20000.00	0.00	42000.00	529000.00
Interest earned of rs. 2000 is re appropriated to overhead								
5	Tripura University	116000.00	187000.00	26000.00	18000.00	0.00	0.00	347000.00

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Vairala

325-326

*Samir*

Administrative  
App. No. MED/2017/107

No. BT/PR25380/NER/95/1168/2017  
GOVERNMENT OF INDIA  
MINISTRY OF SCIENCE & TECHNOLOGY  
DEPARTMENT OF BIOTECHNOLOGY  
(NER-BPMC)

Block 2, 6-8th Floors  
CGO Complex, Lodhi Road,  
New Delhi- 110 003  
Dated: 28 / 09 /2018

**ORDER**

Sanction of the President is hereby accorded, under Rule 18 of the Delegation of Financial Powers Rules ,1978 , for the implementation of the project entitled: "**Development of polyherbal based functional biopolymer hydrogel for delivery of novel healing agents in excision and burn wound.**" for a period of 3 Year 0 Month at a total cost of **Rs. 7542600 (Rupees Seventy Five Lakhs Fourty Two Thousand Six Hundred Only)** on the terms and conditions detailed here under:-

**2 The Project :**

**2.1 Title : "Development of polyherbal based functional biopolymer hydrogel for delivery of novel healing agents in excision and burn wound."**

**2.2 Details of the Investigators:**

**Project Cordinator**

**Prof. samir kumar sil**  
Professor  
Human physiology  
Tripura University  
suryamaninagar, Agartala, Tripura, 799022

**Principal Investigators:**

**Prof. Samir kumar sil**  
Professor  
Human physiology  
Tripura University  
suryamaninagar, Agartala, Tripura,  
799022

**Prof. Parimal Karmakar**  
Professor  
Life Science and Biotechnology  
Jadavpur University  
188 Raja SC Mullick Road,  
Kolkata:700 032, WB, India, ,West  
Bengal, 700032

*Vasudahi*



S.No. UCT



ज्ञान विज्ञान विमुक्तये

**UNIVERSITY GRANTS COMMISSION  
BAHADURSHAH ZAFAR MARG  
NEW DELHI-110002**

FD Diary No. **3181**  
Dated **27.06.2018**

No.F 6-1/2018 (IC)

09 JUL 2018 July, 2018

The Under Secretary (FD-III)  
University Grants Commission  
Bahadur Shah Zafar Marg  
New Delhi-110 002

**Subject:** Release of Grants-in-aid to **Tripura University, Tripura- 799 022** under Indo- Israel Joint Research Programme (4th Cycle).

Sir,

I am directed to convey the sanction of the University Grants Commission for payment of grant of **Rs. 92,00,000/- (Rupees Ninety Two Lakhs Only)** as **1<sup>st</sup> year grant** to the **Registrar, Tripura University, Tripura- 799 022** towards the Project titled "*What role of tropical thunderstorms play in driving the upper tropospheric water vapor feedback?*" under Indo- Israel Joint Research Programme (4th Cycle) for the financial year **2018-2019**.

S.No.	Heads	Head of Account	Allocated amount	Grant now being released	Total Grant
1	Personnel Cost	3(D)31	4500000	1500000	1500000
2	Research Cost		4000000	3500000	3500000
3	Cooperation & Exchanges		2300000	800000	800000
4	Miscellaneous		600000	200000	200000
5	Overhead		600000	200000	200000
6	Equipment/ Instruments		3000000	3000000	3000000
<b>Total</b>			<b>1,50,00,000/-</b>	<b>92,00,000/-</b>	<b>92,00,000/-</b>

- The **sanctioned** amount is debitible under the head of account **3(D)31** and is valid for payment during the financial year **2018-2019 (The unutilized amount of this grant can be carried forward for the next financial year)**.
- The amount of the Grant shall be drawn by the EO (DDO) UGC on the Grants-in-aid bill and shall be disbursed to and credited to the **Registrar, Tripura University, Tripura- 799 022** through Electronic mode as per the following details:

a	Details (Name & Address) of Account Holder	The Registrar, Tripura University, Tripura- 799 022
b	Account No	30371209938
c	Name & address of Bank branch	State Bank of India, Tripura University Campus Branch, Suryamaninagar, Tripura- 799 022
d	MICR Code	799002524
e	IFSC Code	SBIN0010495
f	Type of Account	Savings Accounts

- The Grant is Subject to the adjustment on the basis of Utilization Certificate in the prescribed proforma submitted by the University/Institution.
- The University / Institution shall maintain proper accounts of the expenditure out of the Grants which shall be utilized only on the approved items of expenditure.
- The University / Institution may follow the General Financial Rules, 2017 and take urgent necessary action to amend their manuals of financial procedures to bring them in conformity with GFRs, 2017 and those don't have their own approved manuals on financial procedures may adopt the provisions of GFRs, 2017 and instructions/guideline there under from time to time.
- The Utilization Certificate to the effect that the grant has been utilized for the purpose for which it has been sanctioned shall be furnished to UGC as early as possible after the close of Savings Accounts financial year.
- The assets acquired wholly for substantially out of University Grants Commission's Grant shall not be disposed or encumbered or utilised for the purposes other than those for which the grants was given without proper sanction of the UGC and should at any time the University ceased to function, such assets shall revert to the University Grants Commission.

ou  
**ISSUED**



**Research Collaboration of Dr. Swanirbhar Majumder,  
Department of Information Technology, Tripura University  
with Maibam Sanju Meitei, Assistant Professor, Rajiv Gandhi  
University, Arunachal Pradesh.**

1. "A Mathematical Modelling And 3D Simulation Of ZnO Piezoelectric Base Cantilever For Pressure Sensing", Page 37-41 of IJSTR(International Journal of Scientific & Technology Research) Volume 9 - Issue 9, September 2020 Edition - ISSN 2277-8616, (Maibam Sanju Meitei, Aheibam Dinamani Singh, Swanirbhar Majumder, Ome Moyong)
2. "A Mathematical Modelling and 3D Analysis of PZT-5H Piezoelectric Base Bridge Pressure Sensor" , International Journal of Mechanical Engineering and Technology (IJMET), Volume 10, Issue 11, November 2019, pp. 407-415, Article ID: IJMET\_10\_11\_034, Available online at <http://www.iaeme.com/ijmet/issues.asp?JType=IJMET&VType=10&IType=11>, ISSN Print: 0976-6340 and ISSN Online: 0976-635, (Maibam Sanju Meitei, Aheibam Dinamani Singh, Swanirbhar Majumder)
3. "An Engineering Approach for Modeling and Design of a Diaphragm Based Comb Drive Capacitive Pressure Sensor", Proceedings of 5th International Conference on Information & Management Skills (ICCM) 2019, pg 70-73, ISSN: 1556-5068, SSRN: <https://ssrn.com/abstract=3516732> (Maibam Sanju Meitei, Aheibam Dinamani Singh, Swanirbhar Majumder)
4. "A Novel Design and Modeling of Beam Bridge structure Piezoelectric Pressure Sensor base on ZnO", Proceedings of 5th International Conference on Information & Management Skills (ICCM) 2019, pg 106-110, ISSN: 1556-5068, SSRN: <https://ssrn.com/abstract=3517369> (Maibam Sanju Meitei, Aheibam Dinamani Singh, Swanirbhar Majumder)

**Research Collaboration of Dr. Swanirbhar Majumder,  
Department of Information Technology, Tripura University  
with Prof. Thermicon Tuithung, Professor, NIT Nagaland.**

1. "A New Steganography Method Using Integer Wavelet Transform and Least Significant Bit Substitution", Section C: Computational Intelligence, Machine Learning and Data Analytics, The Computer Journal, published by Oxford University Press, Impact Factor 0.792, 5-year Impact Factor:0.860, Copyright © 2019 DOI: :10.1093/comjnl/bxz014, British Computer Society, ISSN 0010-4620. (M. Kalita, S. Majumder, T. Tuithung)
2. "An Adaptive Color Image Steganography Method using Adjacent Pixel Value Differencing and LSB Substitution Technique", Cryptologia Journal, published by Taylor and Francis, Impact Factor 0.326, ISSN: 0161-1194 (Print) 1558-1586 (Online). DOI: 10.1080/01611194.2019.1579122 (M. Kalita, S. Majumder, T. Tuithung)

सीएसआईआर-केन्द्रीय खनन एवं ईंधन अनुसंधान संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद)  
बरवा रोड, धनबाद - 826 015, झारखण्ड, भारत  
एक आई एस ओ 9001 प्रमाणित संस्थान



CSIR-Central Institute of Mining and Fuel Research

(Council of Scientific and Industrial Research)  
Barwa Road, Dhanbad - 826 015, Jharkhand, India  
An ISO 9001 Certified Institute

**Mr. Harjeet Nath**  
Assistant Professor  
Department of Chemical & Polymer Engineering  
Tripura University (A Central University), Agartala, India

**To whom it may concern**

I am very happy to mention that we have active collaboration with your research group at Department of Chemical & Polymer Engineering, Tripura University and my research group at Gasification and Catalysis Laboratory, CSIR CIMFR (Digwadih Campus) since 2018. As a result of collaborative research we have several peer reviewed joint publications in our credit. Also researchers from your group have made successful exchange visits as part of internship program. I hope in near future our collaborative research will results some more fruitful outcome.

Thank you very much.

Sincerely,

**Vishal Chauhan**  
Scientist  
Gasification and Catalysis Research Group  
CSIR-Central Institute of Mining and Fuel Research  
(Ministry of Science & Technology, Govt. of India)  
Dhanbad - 828108, Jharkhand, India  
Phone: 09411850253  
Email: [vishal.cimfr@gmail.com](mailto:vishal.cimfr@gmail.com)  
[vishalchauhan@cimfr.nic.in](mailto:vishalchauhan@cimfr.nic.in)  
Webpage: [www.cimfr.nic.in](http://www.cimfr.nic.in)



12/11

No. BT/PR25260/NER/95/1102/2017  
GOVERNMENT OF INDIA  
MINISTRY OF SCIENCE & TECHNOLOGY  
DEPARTMENT OF BIOTECHNOLOGY  
(NER-BPMC)

Administrative  
Appl. No.: Agri/2017/91

Block 2, 6-8th Floors  
CGO Complex, Lodhi Road,  
New Delhi 110 003  
Dated: 21/01/2019

**ORDER**

Sanction of the President is hereby accorded, under Rule 18 of the Delegation of Financial Powers Rules, 1978, for the implementation of the project entitled: "**Understanding mechanistic detail of growth promotion and stress tolerance in legume crop by fungal endophyte through secretome and metabolomics study**" for a period of 3 Year 0 Month at a total cost of Rs. **7166988** (Rupees Seventy One Lakhs Sixty Six Thousand Nine Hundred and Eighty Eight Only) on the terms and conditions detailed here under:-

**2 The Project :**

**2.1 Title :** "Understanding mechanistic detail of growth promotion and stress tolerance in legume crop by fungal endophyte through secretome and metabolomics study"

**2.2 Details of the Investigators:**

**Project Coordinator**  
**Prof. Ajay Krishna Saha**  
Professor  
Botany  
Tripura University  
Suryamaninagar, Agartala, Tripura, 799022

**Principal Investigators:**  
**Prof. Ajay Krishna Saha**  
Professor  
Botany  
Tripura University  
Suryamaninagar, Agartala, Tripura,  
799022

**Prof. Subhra Chakraborty**  
Scientist-VII (Professor)  
Molecular Biology  
National Institute of Plant Genome  
Research, Jawaharlal Nehru  
University Campus, Aruna Asaf Ali  
Marg, New Delhi, 110067

V. S. S. S.


19. **Endorsement Form**

This is to certify that Mr. Harjeet Nath is having a regular position in our organization/institution/university. This organization/institution/ university agrees to undertake the financial and other management responsibilities for the part of the project work which will be conducted in our organization.

The details of the Finance Officer of the Institute who is authorized to receive the grant on behalf of the Institute including Bank account details, IFSC code are given below:

Date:

Place:

  
Name and signature 3.1.19

of the Head of the organization/institution/university

(Sanit Debroy)  
Registrar (I/C)  
Tripura University  
Suryamaninagar-799022



## MANDATE FORM

### ELECTRONIC CLEARING SERVICE (CREDIT CLEARING) REAL TIME GROSS SETTLEMENT (RTGS) FACILITY FOR RECEIVING PAYMENTS

#### A. DETAILS OF ACCOUNT HOLDER:-

NAME OF ACCOUNT HOLDER	Tripura University Earmarked Special Fund
COMPLETE CONTACT ADDRESS	REGISTRAR, TRIPURA UNIVERSITY, SURYAMANINAGAR, TRIPURA(W)-799022
TELEPHONE NUMBER/FAX/EMAIL	Ph. (0381) 237 9003/4803, FAX: (0381) 237 4803, EMAIL: registrar@tripurauniv.in

#### B. BANK ACCOUNT DETAILS:-

BANK NAME	STATE BANK OF INDIA
BRANCH NAME WITH COMPLETE ADDRESS, TELEPHONE NUMBER AND EMAIL	TRIPURA UNIVERSITY CAMPUS BR., SURYAMANINAGAR, TRIPURA(W), PIN - 799022. EMAIL: sbi.10495@sbi.co.in
WHETHER THE BRANCH IS COMPUTERISED?	YES
WHETHER THE BRANCH IS RTGS ENABLED? IF YES THAN WHAT IS BRANCH IFSC CODE	YES SBIN0010495
WHETHER LINKED WITH PFMS	YES
IS THE BRANCH ALSO NEFT ENABLED?	YES
TYPE OF BANK ACCOUNT (SB/CURRENT/CASH CREDIT)	SAVINGS
COMPLETE BANK ACCOUNT NUMBER (LATEST)	30371209938
MICR CODE OF BANK	799002524
UNIQUE CODE OF PFMS	RJBP00000033
PAN	AACAT1043M
TAN	SHLT00649F
IMPORT EXPORT CODE	0100000053

I hereby declare that the particulars given above are correct and complete. If the transaction is delayed or not effective at all for reasons of incomplete or incorrect information. I would not hold the user institution responsible. I have read the option invitation letter and agree to discharge responsibility expected to me as a participant under the scheme.

The above institution, account no, and bank details are registered/mapped under Public Finance Management System (PFMS).

(.....*P. K. DEBBARMA*.....)  
Signature of  
Assistant Registrar & DDO  
Tripura University,  
Suryamaninagar-799022

Date:

Certified that the particulars furnished above are correct as per our records.

(Bank Stamp)

(.....*P. K. DEBBARMA*.....)  
Signature of Assistant Registrar & DDO



भारतीय प्रौद्योगिकी संस्थान गुवाहाटी,  
गुवाहाटी 781 039

**Indian Institute of Technology**  
**Guwahati, Guwahati 781 039, Assam, India.**

Phone Nos.: +91-361- 258 2082

Fax No. : +91-361- 258 2089  
e-mail : dornd@iitg.ernet.in

Office of the Research and  
Development Section

Prof Gopal Das

Dean Research and Development and  
Professor of Chemistry

**File Ref:NECBH/2018-19**

**Date :18.01.2019**

ENDORSEMENT

This is to certify that **Dr. Sudip Mitra** is having a regular position in our organization/institution/university. This organization/institution/ university agrees to undertake the financial and other management responsibilities for the part of the project work which will be conducted in our organization.

The details of the Finance Officer of the Institute who is authorized to receive the grant on behalf of the Institute including Bank account details, IFSC code are given below:

Institution account name: IITG R&D Account  
Account No: 30314002512  
IFSC Code: SBIN0014262  
Bank: State Bank of India  
Branch Name: IIT Guwahati Branch  
MICR No: 781002053  
Account Type: Saving Account

Date: 18th Jan 2019  
Place: IIT Guwahati

Name and signature  
of Head of the organization/Institution/University

*RDA*  
*18/1/19*

संकायाध्यक्ष, अनुसंधान एवं विकास  
Dean, Research and Development  
भारतीय प्रौद्योगिकी संस्थान गुवाहाटी  
Indian Institute of Technology Guwahati  
गुवाहाटी-781039  
Guwahati-781039



# Design of a fractal inspired antipodal vivaldi antenna with enhanced radiation characteristics for wideband applications

ISSN 1751-8725

Received on 27th May 2018

Revised 23rd December 2018

Accepted on 5th February 2019

E-First on 18th March 2019

doi: 10.1049/iet-map.2018.5360

www.ietdl.org

Anirban Karmakar<sup>1</sup>, Anindita Bhattacharjee<sup>1</sup>, Anuradha Saha<sup>2</sup> ✉, Abhirup Bhawal<sup>1</sup><sup>1</sup>Electronics & Communication Engineering Department, Tripura University (A Central University), Tripura, India<sup>2</sup>Netaji Subhash Engineering College, Kolkata, India

✉ E-mail: anuradha.nsec@gmail.com

**Abstract:** A novel fractal inspired antipodal Vivaldi antenna is proposed for wideband applications. A step-by-step procedure has been employed to design and optimise the performance of the proposed antenna. First, a conventional antipodal Vivaldi antenna (CAVA) is designed as a reference antenna and then a Koch fractal-shaped parasitic lens is introduced in the CAVA. Finally, a fractal-shaped dielectric lens has been added as an extension of the antenna substrate. The presence of parasitic fractal lens in the flare aperture and fractal dielectric lens enhances the antenna bandwidth and also improves field coupling between the antenna arms and produces stronger radiation in the end fire direction which in turn increases the gain and directivity of the antenna. The optimised antenna is fabricated and tested showing  $|S_{11}|$  below  $-10$  dB from 4.2–42 GHz band. The dimension of the proposed antenna is  $186 \times 66 \times 1.524$  mm<sup>3</sup>. Results show that  $|S_{11}|$  characteristics and other parameters are in good agreement with the simulation counterpart.

## 1 Introduction

Nowadays, the demand of broadcast and wireless communication technology is increasing day-by-day. Therefore, the demand for designing antennas with wide impedance bandwidth and higher gain has been increasing. Directional antennas are used to improve the capacity of wireless systems and to reduce the co channel interference and multipath effects. On the other side, wideband antennas are used in different fields including satellite communications, radars, and microwave imaging systems, remote-sensing systems, GPR detection, and medical field [1]. In a broadband directional system, a wideband antenna is used in place of multiple antennas because wideband antenna can have less complexity, lower power consumption, and a more compact footprint. Double-ridge guide horn antenna has been used for such applications but its relatively large and heavy structure makes it inappropriate for various fields [2]. Nowadays, Vivaldi antenna [3] is one of the prominent candidates used for this purpose due to its attractive features like wide bandwidth, planar structure, directive radiation pattern, inexpensive fabrication, and easy integration.

Depending on the frequency of operation, Vivaldi antenna operates as two antennas [4]. At low frequency, it operates as a resonant antenna and at high frequency, as a non-resonant travelling wave radiator. At higher frequency, the radiation is produced from the travelling wave currents along the flare edges. The increase in aperture flare separates the wave energy and generates radiated space waves. In order to direct the radiated fields in the end fire direction, the phase difference between the waves travelling on both arms needs to be  $\sim 180$  degree as shown in Fig. 1. This condition influenced the expansion of the antipodal structure, which yields a wideband feed transition. Due to wide operating bandwidth, the Vivaldi antenna is often preferred for wide band applications but at higher frequencies, the unwanted radiation produced from the currents travelling along the flare ending sections of the antenna reduce the gain and distort the pattern but it can be suppressed by corrugating the ending sections [5] and avoiding the sharp edges, which produce diffracting wave. Another reason for the reduction in performance at high frequency is the sensitivity to the substrate thickness. Actually undesired modes are excited due to increase in thickness. These modes alternate the phases of the waves travelling along the flare section, create the radiation pattern distorted, and cause higher cross-

polarisation levels. To avoid these problems, it is preferred to use thin, low dielectric constant substrate materials. Vivaldi antenna has long electrical flare length, which is necessary for the broadband operation. This long electrical length limits its high-frequency performance due to phase reversals along its length. It can be seen from Fig. 1 that the phase reversal creates off-axis radiation along with end fire radiation from the aperture end of the antenna which is out of phase with the fields from the throat of the antenna. The most effective approach to overcome this off axis radiation problem is to reduce the size of the flare opening and the flare rate. This approach enhances the coupling between the arms as well as weakens the coupling that occurs between different sections of the same arm due to the phase reversal. In this design, parasitic lens is used to overcome this off-axis radiation problem.

In recent years, the demand of Vivaldi antennas is increasing because challenges still lie for size reduction, improvement on radiation characteristics along with extension of impedance bandwidth. In order to achieve this, several researchers have presented different techniques [1, 4, 6–10]. For instance, in [1], a new method known as Herein is used to enhance the directivity and bandwidth of the antenna. In this method, an elliptical-shaped parasitic lens is introduced in the flare aperture section of the antenna to generate stronger end fire radiation by improving the E-field coupling between arms. In [4], the substrate between the arms of the antenna was designed as a triangular structure to increase the high-frequency performance of the antenna. This comb-shaped slits are used to provide gain at higher frequencies. In [11], a high permittivity material lens and, in [12], meta-material were introduced in the aperture of the antenna to direct the energy in end fire direction. In [6], half elliptical-shaped dielectric lens as an extension of the substrate is added to achieve better front-to-back ratio and gain at higher frequency. In [7], to enhance gain and front-to-back ratio of the antenna at high-frequency comb-shaped slits etched on the edge of the radiators. In [8], corrugated structure applied on the Vivaldi antenna to achieve wide bandwidth, higher gain, and narrow-shaped beam over the entire frequency range. In [9], tapered slot edge with resonant cavity structure is used in the antenna design to extend the bandwidth of the antenna and improve the gain of the antenna. The dielectric director of hemisphere shape [10] is used to improve the higher frequency gain. These antennas have lower gain at high frequencies [1, 4, 6–9] and the bandwidth



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गुवाहाटी 781 039, असम, भारत  
**Indian Institute of Technology Guwahati,**  
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Office of Dean Research and  
Development Section

**Prof Gopal Das**

Dean Research and Development & the

Coordinator, NECBH Programme

IIT Guwahati

Assam 781039

Ref: NECBH/2019-20/177

Date : 29-04-2019

Sanction Letter

PI Name: Swanirbhar Majumder

Category: Eureka

Your Project ID: 177

Project Title: Multivariate intrinsic mode functions for electroencephalogram signals using single channel

Duration: 2.5 Years

Total Sanction amount: Rs. 1592462.00

Account Head	For Principal Investigator	For CO PI IITG	For CO PI Other Institutes
Non-Recurring	200000.00	Nil	Nil
Man Power	687500.00	Nil	Nil
Consumables	100000.00	100000.00	Nil
Travel	50000.00	Nil	Nil
Contingency	85000.00	50000.00	Nil
Total	1122500.00	150000.00	Nil
Over Head	112250.00	Nil	Nil
Instrument Maintenance For NECBH		207712.00	
Grand Total		1592462.00	

Sincerely Yours,

Gopal Das

**Terms and conditions**

1. The principal investigator (PI) has to acknowledge project number BT/COE/34/SP28408/2018 of Department of Biotechnology (DBT), Govt. of India for the financial support.
2. Funds will be released in subsequent installation subject to satisfactory performance of the project and availability of fund.
3. The Institute/PI would furnish a Utilization Certificate and an audited statement of expenditure duly signed by the PI, the Head of the Institute and the Head of the Finance wing, pertaining to the grant at the end of each financial year as well as a consolidated statement of expenditure at the end of the completion of the project or whenever it is required.
4. The PI is not permitted to seek or utilize funds from any other organization (Government, Semi Government, Autonomous or Private) for this research project.
5. Any unspent part of amount would be surrendered to the **Research and Development Section, IITG** and carry forward of funds of the next financial year for utilization for the same project may be considered only with the specific approval of the **Research and Development Section, IITG and Department of Biotechnology (DBT)**.
6. IIT Guwahati or DBT reserves the right to terminate the grant at any stage and also to recover the amounts already paid if it is convinced that the grant has not been properly utilized or the work on the project has been suspended for any unduly long period or appropriate progress is not being made.
7. The project will become operative with effect from April 29, 2019.
8. A copy of progress report has to be sent in the month of January till the completion of project or whenever it is required.
9. Travel should be used mainly for sample collection, discussion among the PIs not for other purpose. No international Travel will be undertaken from the sanctioned project grant.
10. If the Investigator to whom a grant for a project has been sanctioned leaves the institution where the project is being implemented, PI shall submit five copies of complete and detailed report of the work done by him on the project and the money spent till the date of his/her release and shall also arrange to refund the unspent balance, if any to IIT Guwahati.



# A Compassionate Self Is a True Self? Self-Compassion Promotes Subjective Authenticity

Jia Wei Zhang<sup>1</sup>, Serena Chen<sup>2</sup>, Teodora K. Tomova Shakur<sup>3</sup>, Begüm Bilgin<sup>4</sup>, Wen Jia Chai<sup>5</sup>, Tamilselvan Ramis<sup>5</sup>, Hadi Shaban-Azad<sup>6</sup>, Pooya Razavi<sup>7</sup>, Thingujam Nutankumar<sup>8</sup>, and Arpine Manukyan<sup>2</sup>

Personality and Social Psychology Bulletin  
2019, Vol. 45(9) 1323–1337  
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DOI: 10.1177/0146167218820914  
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## Abstract

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## Keywords

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## Subjective Authenticity and Positive Psychological Adjustment

We focus on authenticity, as defined in terms of subjective feelings of authenticity—that is, “the sense or feeling that

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# A Compassionate Self Is a True Self? Self-Compassion Promotes Subjective Authenticity

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Personality and Social Psychology Bulletin  
2019, Vol. 45(9) 1323–1337  
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DOI: 10.1177/0146167218820914  
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