No. SR/S3/EECE/030/2008 Government of India Department of Science & Technology (Vigyan Aur Prodyogiki Vibhag)

Technology Bhavan, New Mehrauli Road, New Delhi – 110016 Dated 12 January 2009

ORDER

SUB: Financial Assistance under SERC Scheme for the Project Proposal on "Process variational study and performance analysis of nano-scale MOSFETs and FINFETs: TCAD Simulation and Process Aware SPICE Models" from Dr. R Srinivasan, Department of Information Technology, SSN College of Engineering, Old Mahabalipuram Road, Kalavakkam, Chennai - 603110. Release of first installment of the grant.

Sanction of the President is hereby accorded to the above mentioned Project proposal on "Process variational study and performance analysis of nano-scale MOSFETs and FINFETs: TCAD Simulation and Process Aware SPICE Models" from Dr. R Srinivasan, Department of Information Technology, SSN College of Engineering, Old Mahabalipuram Road, Kalavakkam, Chennai - 603110 for a duration of 36 months with a total cost of Rs.21,80,100/-(Rupees Twenty one lakh eighty thousand and one hundred only) and also release an amount of Rs.16,61,700/- (Rupees Sixteen lakh sixty one thousand and seven hundred only) to Principal, SSN College of Engineering, Old Mahabalipuram Road, Kalavakkam, Chennai - 603110 during the year 2008-2009 (Plan) under SERC Scheme, as the 1st installment of grants. The details of grant for which the total allocation of Rs. 21,80,100/- approved for a period of 36 months are given below:-

Sl.No	Sanction head	1st Year	2nd Year	3rd year	Total
I	Salaries	Rs.144,000	Rs.144,000	Rs.168,000	Rs.456,000
One J	RF Rs.12,000/12,0	00/14,000		4 %	
II	Pmt Equipment	Rs.1,234,100	Rs.0	Rs.0	Rs.1,234,100
Work	station with one add	itional hard disk,	TCAD Softwa	are and One La	ser Printer
III	Consumables	Rs.0	Rs.0	Rs.0	Rs.0
IV	Contingency	Rs.40,000	Rs.30,000	Rs.30,000	Rs.100,000
V	Travel	Rs.30,000	Rs.30,000	Rs.30,000	Rs.90,000
	Sub Total	Rs.1,448,100	Rs. 204,000	Rs.228,000	Rs.1,880,100
VI	Over Heads	Rs.213,600	Rs.40,800	Rs.45,600	Rs.300,000
Gran	d Total	Rs.1,661,700	Rs.244,800	Rs.273,600	Rs.2,180,100

2. The sanction of the grant is subject to the Conditions as given in the web site www.serc-dst.org.

- 3. On the basis of the terms & conditions given in Annexure, action is being taken for the drawl of the sanctioned amount as the first installment of the grant during 2008- 2009.
- 4. The amount of Rs.16,61,700/- (Rupees Sixteen lakh sixty one thousand and seven hundred only) being the first installment of the grant will be drawn by the Drawing & Disbursing officer of the Department of Science & Technology from the pay & Accounts office of DST and will disbursed to the Principal, SSN College of Engineering, Old Mahabalipuram Road, Kalavakkam, Chennai 603110 by means of A/C payee Demand Draft.
- 5. Position of Staff is co terminus with the duration of the project and that DST would have no liability to meet these manpower costs beyond the duration of project.
- 6. The institution will furnish to the DST, Utilization Certificate and an audited Statement of Accounts pertaining to the grant immediately after the end of each financial year. Progress Report will be sent every six months.
- 7. The Institute will maintain separate audited accounts for the project. If it is found expedient to keep a part or whole of the grant in a bank account earning interest, the interest earned should be reported to the DST. The interest thus earned will be treated as a credit to the Institute to be adjusted towards further installment of the grant.
- 8. As Per Rule 211(1) of GFR the accounts of Grantee Institution shall be open to inspection by the sanctioning authority/ audit whenever the institute is called upon to do so.
- 9. The expenditure will be debited as under:

Demand No. 83-DST

3425 Other Scientific Research (Major Head)

60 Others (Sub Major Head)

60,200 Assistance to other Scientific Bodies (Minor Head)

25 Research & development support.

25.01 Grants-in-aid for R&D Support.

25.01.31 Grant-in-aid for the year 2008-2009(Plan)

(This amount is being released from (SERC-Engg. Sciences programme)

10. In case the cheque /draft in respect of the amount sanctioned for disbursement under this sanction is not received by the P.I. within 15 days from the date of issue of the sanction the PI may intimate the fact with details of the IFD Diary No. & date to the Joint Secretary and Financial Adviser at the e-mail address fin.adv.dst.dbt@gmail.com for looking into the matter and resolving it.

- 11. The sanction has been issued under the powers delegated to the Ministry/Department and with the concurrence of IFD vide their Sanction No 100/IFD/6395/2008-2009 dated the 19-12-2008.
- 12. Sanction orders regarding its Sl. No..... in the register of grants.

(R.K. Tayal) Scientist-G

To

The Pay & Accounts Officer
Department of Science & Technology
New Delhi

Copy forwarded for information and necessary action to:

- 1. The Director of Audit (CW &M-II), AGCR Bldg, New Delhi
- 2. Cash Section, DST (with two spare copies)
- 3. Sanction folder.
- 4 IFD, DST.
- 5. SERC Sectt., DST.
- 6. The Principal, SSN College of Engineering, Old Mahabalipuram Road, Kalavakkam, Chennai 603110.
- 7. Dr. R Srinivasan, Department of Information Technology, SSN College of Engineering, Old Mahabalipuram Road, Kalavakkam, Chennai 603110.

8. FICCI Cell, DST

R.K. Tayal) Scientist-G Email: erip er@har.drdo.in 011-23007348, 23017661 Tele

Telefax : 011- 23017582



No.ERIP/ER/1104598M/01/1397 Defence Res & Dev Organ(DRDO) HQ Directorate of Extramural Research & Intellectual Property Rights (ER&IPR) B' Wing, DRDO Bhawan, DHQ PO Rajaji Marg, New Delhi - 110105

Dated:

6 Dec 2011

Prof. R. Srinivasan Dept. of Information Technology SSN College of Engg Rajiv Gandhi Road (OMR) Kalavakkam - 603 110 Tamil Nadu

Sub: Grants-in-Aid for research project titled "Study of Soft Errors in 65 nm Gate Length CMOS SRAM and 30 nm Gate Length Fin FET Tunnel FET and Junction less FET Based SRAMs Using TCAD Simulations"

Approval of the competent financial authority Chief Controller R&D is hereby conveyed for a grant of Rs. 30.47 Lakh (Rupees Thirty Lakh Forty Seven Thousand only) to SSN College of Engg, Tamil Nadu for pursuing the research on the subject titled project by Prof. R. Srinivasan, Dept. of Information Technology, SSN College of Engg, Rajiv Gandhi Road (OMR), Kalavakkam - 603 110, Tamil Nadu as Principal investigator.

2. The grant shall be spent as follows:

Expenditure on \downarrow (Rs in lakh) during \rightarrow	Year 1	Year 2	Year 3	Line Total
a) Staff: JRF - 01 *	2.112	2.112	2.376	6.60
b) Equipment (including spares thereof)	19.00	-	-	19.00
c) Operation and maintenance	-	-	-	-
d) Expendables	-	-	-	-
e) Travel (Domestic)	0.25	0.35	0.40	1.00
f) Contingencies	-	-	-	-
g) Visiting faculty or Research Consultant	-	-	-	-
h) Procured services (other than (g)) and metered utilities	-	-	-	-
i) Institutional Overheads Charges	3.138	0.318	0.414	3.87
Column Totals	24.50	2.78	3.19	30.47

^{*} JRF to be paid Rs 16000 + 10 %HRA per month during the first two years of employment and Rs 18000 + 10 % HRA per month during the third year if upgraded as SRF.

(Grand total: Rs. 30.47 Lakh (Rupees Thirty Lakh Forty Seven Thousand only)

- 3. The project will last for Three Years from the date of receipt of the first cheque by the grantee institute.
- The grantee institution may use savings in expenditure on any head (a) to (f) above to augment another upto 10% from one component to another with a provision that increase against any component does not exceed 10% of its original cost. Prior approval of DRDO shall be required to augment by more than ten per cent. Any excess payment without the prior approval of DRDO will be borne by the Grantee Institute.
- DRDO reserve the right to terminate the grant at any stage, if convinced that the grant has not been properly 5. utilized or appropriate progress has not been made/achieved.
- 6. The PI will submit closure reports (05 copies) to DRDO within 60 days of completion/ closure/termination of Project. The report must attached with all necessary certificates and financial informations.
- In case of an PI leaving the Institution or going abroad etc, the Executive authority of the grantee institute to whom the Project has been sanctioned will ensure that the PI submits detailed technical and financial report of the work done before his/her relieve.
- The grantee institution may publicise this grant only with the prior approval of DRDO.

S. Sankaran)





Government of India Department of Atomic Energy (DAE) Board of Research in Nuclear Sciences (BRNS)

Dr Ashok Kumar Pandey Programme Officer

BRNS Secretariat,316-C,CFB, BARC, Trombay, Mumbai-400085 Email: prg1.brns@barc.gov.in

No: 59/14/09/2020-BRNS/59007

OFFICE MEMORANDUM

Sub: R/P entitled "Radiation Resilient RF Receiver Front End Components Through SiGe BiCMOS: Design and Validation" under Dr. Srinivasan R, Department of Information Technology, S.S.N College of engineering, Kalavakkam, Tamil Nadu, 603110. bearing sanction 59/14/09/2020-BRNS with DIR, BRNS.

On the recommendations of the Board of Research in Nuclear Sciences (BRNS), I am pleased to convey the administrative approval and sanction of the President of India for the captioned project for 3 years beginning from financial year 2020-2021 with a total grant of Rs. 32,49,850/- (Rupees thirty two lakh fourty nine thousand eight hundred fifty only) for the project as under:

Item of expenditure	Year 1	Year 2	Year 3
	(2020-2021)	(2021-2022)	(2022-2023)
Equipments	700000	800000	, 0
Staff Salary - JRF	372000	372000	0
Staff Salary - SRF (1)	0	0	420000
Travel - Pl	25000	25000	25000
Contingencies	0	50000	50000
Overheads	82275	89775	33375
Total(INR)	1179275	1336775	528375

Note: * Chip Fabrication - I, Chip Fabrication - II

JRF salary calculated @31,000/- p.m. for first two years and on redesignation by committee on in third year as SRF @ 35,000/- p.m.

Please note that as per the government orders under **Direct Benefit Transfer (DBT)scheme**, the **staff salary has to be transferred to his/her bank account**. Accordingly, Aadhar Number(UID) of the appointed staff, Bank Account details and the Mobile number linked to the bank account should be obtained and it should be intimated to this office.

Overheads calculated @ 7.5% of the other heads except contingency. The remaining 7.5% towards overheads (Rs. 2,05,425/-) shall be released only on meeting the requirements specified (See Annex-B).

- I am also pleased to convey the sanction of the President of India to incur an expenditure of Rs. 11,79,275/(Rupees eleven lakh seventy nine thousand two hundred seventy five only) towards grant for the year 2020-2021.
- 3. The expenditure involved is debitable to: 03 3401 00 004 27 0231.
- This is issued with the concurrence of the competent authority in the Department.

Dr. Ashok Kumar Pandey

Copy forwarded to:

- 1. Director of Audit, Scientific Department, AEAP, OYC, CSM Marg, Mumbai-400 001.
- Joint Secretary (R&D), DAE, Anushakti Bhavan, CSM Marg, Mumbai-400 001.
- 3. Principal, S.S.N College of engineering, Kalavakkam, Tamil Nadu, 603110...
- Principal Investigator(PI): Dr. Srinivasan R, Department of Information Technology, S.S.N College of engineering, Kalavakkam, Tamil Nadu, 603110.
- A. First year grant is being released in full along with this Sanction Letter through Pay & Accounts Officer, Department of Atomic Energy, Anushakti Bhavan, CSM Marg, Mumbai-400 001 directly. You may await a Money transfer (MT) through ECS and The amount would be credited electronically to A/C No: 158100050070022, A/C Name: The Principal, SSN College of engihneering, IFSC: TMBL0000158, Tamilnad Mercantile Bank Ltd No. 3, thiruvalluvar Salai Thiruvanmiyur Chennai 600 041 Tamilnadu.
- i) Acceptance of this sanction and the MT for the amount sanctioned for the first financial year may please be acknowledged (Form-I).
- ii) A sticker of the BRNS LOGO (Copy Enclosed) should be pasted on all the items procured under the project.
- iii) THIS SANCTION IS FURTHER SUBJECT TO THE CONDITIONS STIPULATED IN ANNEX (ENCLOSED), WHICH MAY BE GONE THROUGH CAREFULLY.
- B. Second year Sanction Letter will be issued automatically in the month of April/May of the 2nd financial year, however, the grant will be released (unspent balance of previous year and Interest earned will be adjusted) after the PI submits the following documents to the Programme Officer DIR:
- a) Claim in Form-II quoting the reference of the sanction issued for the first year.
- b) Utilisation Certificate (UC) as on 31st March of the preceding financial year in Form-III duly audited by the Internal Auditor of the University/ Institution or a Chartered Accountant.
- c) Statement of Accounts (SA) as on 31st March of the preceding financial year should be updated on the website. Interest earned in previous year should be reflected in the Statement of Accounts. A printout of the same should be sent to BRNS after it is duly audited by the Internal Auditor of the University/ Institution or a Chartered Accountant.
- d) Copy of appointment order and joining report of the staff appointed for the project along with minutes of the Selection Committee, alongwith HRA CLAIM (if applicable), should be uploaded in a single pdf file under the file head "Staff Appointment Details". In addition, the details of the appointed staff should also be updated in the available menu.
- e) The inventory of equipment also should be updated in the menu, besides uploading the purchase order of the items costing more than 1 Lakh.
- f) A One Page report on the progress of work during first year.
- C. Third and subsequent years (if any) the Sanction Letter and the grant will be released on fulfillment of the following requirements:
- i) Renewal/ Extension Application: Principal Investigator (PI) is required to upload by January 15 a pdf copy of duly signed renewal/ extension application in the prescribed form-(PRA) after logging into his/her account at https://brns.res.in. All applications received shall be examined by experts from the field and PIs may be invited to a Technical Programme Discussion Meeting (TPDM). Renewal of the project will be based on the recommendations of the TPDM, Advisory Committee and the Board.
- ii) Sanction Letter: If the progress is found to be satisfactory the renewal sanction for the year will be issued in the beginning of that financial year in April/May.
- iii) Claim: On receipt of the renewal sanction, the PI shall claim the funds sanctioned by submitting the following documents to Programme Officer DIR, 316-C, Common Facility Building, BARC, Trombay, Mumbai-400085:
 - a) Claim in Form-II quoting reference of the renewal sanction.
- b) Utilisation Certificate (UC) as on 31st March of the preceding financial year in Form-III duly audited by the Internal Auditor of the University/ Institution or a Chartered Accountant, should be reflected in the Statement of Accounts.
- c) Statement of Accounts (SA) as on 31st March of the preceding financial year including the amount of Interest earned in previous year and duly audited by the Internal Auditor of the University/ Institution or a Chartered Accountant.

- d) Copy of appointment order and joining report of the staff appointed for the project along with minutes of the Selection Committee.
- e) An inventory of equipment and the copy of Purchase order of equipments costing more than 1 Lakh.
- D. At the end of Terminal Year the Settlement Grant and the Balance 7.5% Overheads will be released on fulfillment of the following requirements:
 - a) Claim Form-II if any,
- b) The final Consolidated Statement of Accounts (SA) and Consolidated Utilization Certificate duly audited by an external Chartered Accountant or the Statutory (Govt.) Auditor. It is mandatory to include the amount of bank interest earned on the grant released into the SA.
 - c) Final Consolidated Progress Report and a brief report as per format given in Form-VII.
- 5. AAO (Cheque), DAE, Anushakti Bhavan, CSM Marg, Mumbai 400 001 With a request that the amount granted for the first year of the project may be released.
- Member Secretary (DIR): Dr. Nagaraj Alangi, ms9.brns@barc.gov.in; Ph:+91-1234
- Co-Investigator (CI): Premanand V Chandramani, Department of ECE, S.S.N College of engineering Kalavakkam - 603 110 Chennai, Tamilnadu, Email: premanandc@ssn.edu.in, Mobile: 9003260540K K Nagarajan, Dept of ECE SSN College of engineering OMR Kalavakkam- 603 110
- 8. Project Collaborator (PC): Dr. Susanta Kumar Pal, Scientific Officer(H) Head, Applied Electronics Division, VECC Kolkata-700064, Email: sushant@vecc.gov.in, Mobile:9433381156

You or your nominee may please be the DAE representative for selection of Research Fellow/ Research Associate for the project.

Dr. Ashok Kumar Pandey

Note:

1. Please quote the Sanction Number 59/14/09/2020-BRNS in all your correspondence with BRNS