



**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),  
Sivakasi**

(Affiliated to Madurai Kamaraj University, Reaccredited with "A" Grade by NAAC,  
College with Potential for Excellence by UGC & Mentor Institution under UGC PARAMARSH)

**NAAC SSR Cycle IV (2015-2020)**

**3.4. RESEARCH PUBLICATIONS  
AND AWARDS**

**3.4.1 IMPLEMENTATION OF CODE OF ETHICS FOR  
RESEARCH**

**PLAGIARISM CHECK  
THROUGH SOFTWARE**



**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),  
SIVAKASI – 626 123.**

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**COUNCIL MINUTES REGARDING  
PLAGIARISM CHECK**

#### Minutes of the Council Meeting

The Council Meeting was held on 23.01.2020 at 10 a.m. at the Secretary room. Points regarding Syllabus Guidelines, Seed Money, Sports Day, Board of Studies, and General Instructions were discussed.

#### ◆ 2020 Syllabus Guidelines

- HOD and Staff-in-Charge for Syllabus are asked to check 2020 Syllabus Guidelines, eligibility conditions for Admission, CO, PO, PEO's, PAM Weightage, Vision, Mission, Hours and Credit.
- Asked to ensure Part III subjects should have more PAM Weightage than Part IV subjects.
- Resolved all the faculty members have discussion regarding Syllabus 2020 from 3.30 p.m. to 4.30 p.m. on 29<sup>th</sup> and 30<sup>th</sup> January 2020.
- All the Departments are asked to submit the Syllabus on 31<sup>st</sup> January 2020 along with the feedback given by the External examiner with Justification.
- Decided to include Professional Ethics as one chapter in Peace Education for UG students and Research Ethics for PG and M.Phil students.

#### ◆ Board of Studies

- Resolved to have one Expert from other University and atleast one Expert should have thorough knowledge in OSE.

#### ◆ Sports Day and College Day

- Decided to conduct Sports Day on 1<sup>st</sup> February 2020.
- The date for Convocation Day and College Day will be decided after having discussion with the Management.

#### ◆ Library

- Audio Visual centre have started in the library.
- Staff members, PG students and Research scholars are asked to check plagiarism for their research papers, articles and books at free of cost for the first time.

#### ◆ Appreciation

- Our college have been selected as Mentor Institution and the sanctioned amount is Rs.30 lakhs out of which our college has received Rs.15 lakhs.
- All the departments are asked to mention below the college name as "Mentor Institution under UGC patronage".
- Our college has been received Food Safety Certificate for hostel, canteen and store. Getting FSSAI certificate for Bakery unit is in process.

#### ◆ PO & CO Attainment

- All the departments are asked to maintain CIA test paper and PO attainment file for the batch 2019-2020 and also have backup in pen drive.
- Faculty members are asked to give reasons and suggestions if they are unable attain CO in the term test and the same should be duly signed by the Course teachers and HOD.

#### ◆ General Instructions

- Planned to conduct Term Test on 20<sup>th</sup> of every month.
- Resolved to place orders in the college canteen for the participants while conducting any programmes. If necessary, Chief Guest lunch will be arranged in the hostel.
- Decided to mention the sponsor either the Management or Autonomy Grant or both should be specified in the invitation while conducting any programmes.
- Faculty members are asked to ensure the language correction for the article to be published either in the College Magazine or Department Magazine for publication.
- Faculty members are asked to be punctual to the class and make the campus silence.
- Faculty members are asked not to bring their vehicles to the Administrative Block.
- All the departments are asked to include the hostel students to participate in the inter-collegiate Meet.
- HOD's are asked to submit the ICT register to the IQAC.
- Every faculty member must submit their report to the IQAC duly signed by the Programme Officer and HOD every month regarding their contribution to the college.
- Staff members are asked to discuss about the students' satisfaction survey with the final year students and also ask them to intimate their active mobile number and check their e-mail id regularly.

- Resolved to ask the students to wear saree for one week who failed to wear the saree during ethnic wear day.
- Decided to start Yoga centre, Counselling room, Placement room, Three max studio and Lecture capturing system.
- Felicitation for publication will be submitted in the prescribed format with evidence.
- All the departments must maintain department minutes note.
- Decided to carry out the activities under Green audit, Energy audit and Environment audit committee.
- Planned to have LED light and Motion based/Sensor based system fans in the class room.
- Discussed to put the banners outside the college campus about the Women empowerment courses and other Part V activities.
- All the departments are asked to take photos with Geo tag application.
- Resolved to display the activities of the department evidences in A3 Digital print during NAAC visit.
- All the departments are asked to put the prominent alumnae photos with their position and batch in the college website.
- All the departments are asked to get feedback from the employer about alumnae performance in school, college, factory and company with their letter head and duly signed by the principal or executives along with seal.
- Register should be properly maintained in the Language Lab.
- Decided to paste instructions, designs and stickers in all the labs.
- Decided to display Vision, Mission, PEO and PSO in front of all the departments.
- Faculty members both Regular and SF are asked to submit project proposal as per guidelines to get Seed Money from the Management for Research after scrutinizing by the IQAC Committee.

M. Sutharnani,  
M. R.  
Council Secretaries

T. Palanisami  
Principal

#### Minutes of the Council Meeting

The Council Meeting was held on 17.03.2020 at 10 a.m. at the Secretary room. Points regarding Board of Studies, III Term Test, Project Submission and OBE attainment were discussed.

#### ◆ Term Test & OBE Attainment

- Resolved to upload the III Term Test Mark in the Flair on 13<sup>th</sup> April 2020.
- Last date for CIA verification will be on 15<sup>th</sup> April 2020.
- Decided to submit the Project on 9<sup>th</sup> April 2020.
- Students are asked to check Plagiarism in the library on or before 24<sup>th</sup> March 2020.
- HODs are asked to check and ensure the last sheet of final OBE attainment.

#### ◆ Board of Studies

- Decided to conduct Board of Studies meeting on April 27<sup>th</sup> for Arts and 28<sup>th</sup> for Science.
- Resolved to submit the Syllabus 2020 on or before 22<sup>nd</sup> March 2020.

#### ◆ Others

- Decided to prepare and submit the Department Wise consolidated Academic Audit Report for the year 2019-2020 on or before 30<sup>th</sup> March 2020.
- Planned to conduct Criterion Wise Meeting on 30<sup>th</sup> March 2020.
- Asked to submit the workload for the Even Semester 2019-2020 on the last working day.

M. Sankaranarayanan  
Msy  
Council Secretaries

P. Palaniswami  
Principal  
Dr. T. Palaniswari  
PRINCIPAL  
The Student Fireworks  
Rajawade College  
for Women,  
SIVAKASE

**URKUND SOFTWARE**



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**NAME OF THE SOFTWARE USED : URUKUND**

**PURCHASE DETAILS OF URUKUND SOFTWARE**

**eGalactic**

**INVOICE**

INVOICE NO: 2019/EG/1176  
DATE: 31-MAR-19

Customer Information  
Standard Fireworks Rajaratnam College for Women  
Thiruvargal Road,  
Sivakasi  
Tamil Nadu - 626123

Client GST No. NA

S.No.	Particulars	Tax rate	Amount
1	URUKUND Anti Plagiarism Licenses for a maximum of 600 documents		76500
	IGST @ 18%	18%	13600
<b>TOTAL</b>			<b>90100</b>

Amount in words: Rupees eighty one thousand one hundred fifty eight only

**TO PAY**  
Date: 31/3/19  
Principal

**E & OE**

1. Payment within 10 days from invoice date  
2. Cheque to be issued in favor of "eGalactic"  
3. Yes Bank, Account No: 000093800000437  
4. IFS Code: YESB0300003  
5. PAN No: WVRPS3430L  
6. GST No: 27AVRPS3430L32W

FOR eGalactic  
Authorized Signatory

CPE Grant  
A. Murugesan

Standard Fireworks Rajaratnam College for Women  
Sivakasi

Sudha Prasad  
CPE - Coordinator  
Entered in the record  
Department: 03.03.2019

Address: B - 302, Supreme Palms, Balewadi, Pune - 411042 | Call: 91-9608893111  
Email: rishu@egalactic.in | Visit Us: www.egalactic.in







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**PLAGIARISM CHECK  
SAMPLE REPORT**

## Urkund Analysis Result

Analysed Document: esther.docx (D66160736)  
Submitted: 3/23/2020 7:23:00 AM  
Submitted By: yasmin-lib@sfrcollege.edu.in  
Significance: 15 %

### Sources included in the report:

fertou.docx (D66160737)  
[https://www.researchgate.net/  
publication/292187181\\_Structural\\_optical\\_and\\_magnetic\\_properties\\_of\\_Ni\\_doped\\_SnO2\\_nanop  
articles](https://www.researchgate.net/publication/292187181_Structural_optical_and_magnetic_properties_of_Ni_doped_SnO2_nanoparticles)

### Instances where selected sources appear:

3

CHAPTER - III "RESULT AND DISCUSSION" "X RAY DIFFRACTION ANALYSIS" "XRD pattern used to determine the structure, phase and particle size of the particle, structural parameters of the sample. Figure 1 shows the pure and Ni doped SnO<sub>2</sub> XRD pattern". The "scherrer's equation used to compute

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66%

the average crystallite size of the nanoparticles. " $D = k\lambda / (\beta \cos \theta)$

Where, D is the size of the crystallite ,k

is the shape factor,

$\lambda$  is the wavelength of the incident

X-ray beam,  $\beta$  is the

full width at half maximum

and  $\theta$  is the Bragg angle".

The

rutile structure was compared with JCPDS data (card No: 41-1445).The pure SnO<sub>2</sub> and Ni doped SnO<sub>2</sub> nanoparticles exhibit three major axes appears at 27.3°, 33.8°, 51.5° respectively.

The peaks come out at (101) phase ( $2\theta \approx 27.3$ ), (1 1 0) phase ( $2\theta \approx 33.8$ ), (2 1 1) phase ( $2\theta \approx 51.5$ ).

"The lattice parameter for tetragonal structure were calculated using this formula"

" $d_{hkl} = 1 / \sqrt{((h^2 + k^2 / a^2) + l^2 / c^2)}$ "

"Where,

hkl are integral lattice plane index

a,c is the lattice constant."

"Table 1 : Structural parameters"

"Table 2 : Average crystallite size of SnO<sub>2</sub> nanoparticles"

Figure 1 :XRD pattern for pure and Ni doped SnO<sub>2</sub>

0: [https://www.researchgate.net/](https://www.researchgate.net/publication/292187181_Structural_optical_and_magnetic_properties_of_Ni_doped_SnO2_nanoparticles)

publication/292187181\_Structural\_optical\_and\_magnetic\_properties\_of\_Ni\_doped\_SnO<sub>2</sub> nanoparticles

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The Ni doping does not change the tetragonal structure of SnO<sub>2</sub>. The

intensity of the peaks decreases when increases the concentration of Ni. The full width at half maxima indicates the particle size of the Ni doped Tin oxide nanoparticles decreases when the Ni concentration is increased. "VIBRATIONAL ANALYSIS" "FTIR SPECTROSCOPY" The figure 2 indicate the FTIR spectrum of pure and Ni doped SnO<sub>2</sub>. The four main characteristic peaks are exhibited by the FTIR spectrum of pure and Ni doped SnO<sub>2</sub>. The peak at around 540 – 620 cm<sup>-1</sup>, which refers the sn-o stretching modes of sn-o-sn. The peak appear at around 1600-1680 cm<sup>-1</sup>, 2260-2500 cm<sup>-1</sup> and 3150-3450 cm<sup>-1</sup>, which refers the stretching vibration of water molecules. "Table 3 : FTIR spectrum of pure Sno2 and Ni doped sno2 nanoparticles"

Figure 2: FTIR spectrum of pure and Ni doped SnO<sub>2</sub> nanoparticles

"OPTICAL ANALYSIS" "UV – VISIBLE ABSORPTION SPECTROSCOPY"

Figure 3: UV-Vis absorption spectra of pure and Ni doped SnO<sub>2</sub> nanoparticles. The band energy is calculated by the Tauc plot.  $(\alpha h\nu)^2 = A(E_g - h\nu)$  "Where, A – Constant  $E_g$  – Band gap of the particles  $h$  – planck's constant  $\alpha$ – absorption coefficient"

The absorbance depends upon the band gap, surface roughness and impurity centres.

Figure 4: Tau plot for pure and Ni doped SnO<sub>2</sub> nanoparticles Tau plot for pure and Ni doped SnO<sub>2</sub> quantum dots are represented by figure 4. The corresponding band gap values were calculated which is given in the table 4. The band gap value of Ni doped SnO<sub>2</sub> are less than the pure Tin oxide. The value of the band gaps are increased.

"Table 4: Band gap of synthesized nanoparticles"

"

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ELECTRICAL ANALYSIS" "AC IMPEDANCE SPECTROSCOPY"

Figure 5: Conductance spectra of pure and Ni doped SnO<sub>2</sub>

nano particles at room temperature.

Figure 6: conductance spectra of Ni doped SnO<sub>2</sub> nanoparticles

Table 5 : Conductance spectra of pure and Ni doped sno2 nano particles.

Figure 7: cole-cole plot for pure and Ni doped SnO<sub>2</sub> nanoparticles The valuation of ion conductivity are calculated by the following equation " $\sigma = L/RBA$

Here, L is the thickness A is the surface area Rb is the bulk resistance"

Figure 7: cole – cole plot for Ni doped SnO<sub>2</sub> nanoparticles

"Table 6: cole - cole plot data of pure and Ni doped SnO<sub>2</sub> nano particles."

The maximum value of conductivity is  $6.553 \times 10^{-6}$  s/cm for pure tin oxide nanoparticles. When Ni is added to the pure SnO<sub>2</sub> nanoparticles the conductivity is increased till the D4 concentration but is suddenly decreased in D5 because the amount of Ni dopant is increased. The maximum ionic conductivity for pure tin oxide nano particles is  $9.221 \times 10^{-6}$  observed from the .The values of conductivity is increased.

## Hit and source - focused comparison, Side by Side:

Left side: As student entered the text in the submitted document.

Right side: As the text appears in the source.

Instances from: fertou.docx

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the average crystallite size of the nanoparticles. " $D=k\lambda/(\beta \cos \theta)$		The average crystallite size of the nanoparticles where calculated based on the scherrer's equation is, " $D=k\lambda / (\beta \cos \theta)$ " Where, "D	
Where, D is the size of the crystallite ,k		is the crystallite size". "K is the shape factor as 0.89". " $\lambda$ is the	
is the shape factor,		wavelength of the incident x- ray beam (1.54178x 10-10 m)," " $\beta$ is	
$\lambda$ is the wavelength of the incident		the full width at half maximum of XRD peak". " $\theta$ is the bragg	
X-ray beam, $\beta$ is the		angle, (	
full width at half maximum			
and $\theta$ is the Bragg angle".			
3	78%	3: fertou.docx	78%
ELECTRICAL ANALYSIS: "AC IMPEDANCE SPECTROSCOPY"		ELECTRICAL ANALYSIS: "AC IMPEDANCE SPECTROSCOPY": The	
		conductance spectra of " pure and Mg doped SnO2"	

Figure 5: Conductance spectra of pure and Ni doped SnO<sub>2</sub>

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Instances from: [https://www.researchgate.net/publication/292187181\\_Structural\\_optical\\_and\\_magnetic\\_properties\\_of\\_Ni\\_doped\\_SnO2\\_nanoparticles](https://www.researchgate.net/publication/292187181_Structural_optical_and_magnetic_properties_of_Ni_doped_SnO2_nanoparticles)

2

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The

2: [https://www.researchgate.net/publication/292187181\\_Structural\\_optical\\_and\\_magnetic\\_properties\\_of\\_Ni\\_doped\\_SnO2\\_nanoparticles](https://www.researchgate.net/publication/292187181_Structural_optical_and_magnetic_properties_of_Ni_doped_SnO2_nanoparticles) 87%

the Ni doping does not transform the tetragonal structure of SnO<sub>2</sub>. The