#### **RESUME**



**Subhashree Pattnayak** 

D/O – Giridhari Pattnayak Plot no. - N1-281,I.R.C Village, Nayapalli, BBSR - 751015 Contact:

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#### **CAREER OBJECTIVE:**

Looking for a position in an educational organization where acquired skills and education will be utilized towards continuous growth and advancement and also provide opportunity to learn new ideas regarding Phyto-diversity.

### **Experience:** (3.5 years of research & 6 months of teaching experience)

#### 1) CSIR-IMMT (Institute of Minerals and Material Technology, BBSR)

Place: Bhubaneswar, Odisha

Tenure: 1<sup>st</sup> May, 2015 – 30<sup>th</sup> Sept, 2018

Position: Research Scholar (Project Assistant-II)

Role:

- 1. Estimation of Carbon Stock in deciduous forest of Chandaka Wildlife Sanctuary, Odisha and compare the value with other forests of India
- 2. Finding out the Litter Carbon in forest areas
- 3. Execute the field survey in forest areas with plotting for collection of plant and soil sample
- 4. Analyze the plant species composition pattern in deciduous forest
- 5. Identification and documentation of plant species
- 6. A good understanding on species IVI and species diversity indices
- 7. Estimation of the soil Physico-chemical Parameters (pH, Electrical conductivity, water holding capacity, moisture content, soil organic carbon )
- 8. Knowledge on FTIR. XRD, SEM
- 9. Conducted ethno botanical survey in rural area of Rayagada district
- 10. Executed successfully the collection, Identification and Documentation of coastal plants in IGCAR Kalpakkam, Tamil Nadu.
- 11. Good Knowledge on analyzing and comparing the significance of data through ANOVA, Correlation and Regression analysis

## 2) Government Girls Higher Secondary School, Rayagada, Odisha

Place: Dongasil, Rayagada, Odisha

Tenure : 1<sup>st</sup> October, 2014 – 12<sup>th</sup> April, 2015

Position: PGT (Botany)

Role:

- 1. Teaching 11<sup>th</sup> & 12<sup>th</sup> school students
- 2. Addition to the above, also worked as hostel warden.

# **Technical Knowledge**

- 1. Past, SPSS and Origin software
- 2. MS word, MS excel and MS power point presentation

# **Project Details:**

| Title                                                                                                                                              | Members                                                                                                                                                                                                                  | Duration                    | Funding agencies               |
|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------|
| Assessment of Floral Diversity<br>of Indira Gandhi Centre for<br>Atomic Research, Kalpakkam<br>site, Tamil Nadu                                    | Ms.Subhashree Pattnayak (Research Scholar) Dr. N. K. Dhal (Chief Scientist, IMMT, BBSR), Dr. N.C. Rout (Team Member, IMMT, BBSR), Dr. K.K. Satpathy (Chief Scientist, IGCAR, TN), Dr. N.P.I. Das (Scientist, IGCAR, TN). | April, 2017-<br>Sept., 2018 | IGCAR,<br>Tamil Nadu,<br>India |
| Assessment of Species Composition and Carbon Stock Estimation in Chandaka Wildlife Sanctuary, Odisha, India; Implication of Sustainable Management | Ms. Subhashree Pattnayak(Research Scholar) Dr. N.K. Dhal (Chief Scientist, IMMT, BBSR), Dr. M. Kumar (Principal Scientist,IMMT,BBSR) Dr. N. C. Rout (Team Member, IMMT, BBSR)                                            | May, 2015 –<br>March, 2017  | PCCF,<br>Odisha<br>Govt.       |
| Physiological and Biochemical<br>Toxicity Studies in Rice<br>(Oryza sativa L.) Induced under<br>Nickel Stress".                                    | Ms. Subhashree Pattnayak                                                                                                                                                                                                 | 2013                        | M.Sc.<br>Project               |

# **Academic Details:**

| Subject          | School/College                                     | University              | Year of Passing                                                                                                                                      | Marks (%)                       |
|------------------|----------------------------------------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| Ph. D(Botany)    | Sambalpur<br>University                            | Sambalpur<br>University | Awarded Ph. D in Oct 2023 : "Species Composition & Carbon Stock Assessment in Mixed Deciduous Forest of Chandaka Wildlife Sanctuary, Odisha, India." |                                 |
| M. Sc(Botany)    | Utkal University                                   | Utkal University        | 2013                                                                                                                                                 | 75.40                           |
| B. Sc(Botany)    | Rama Devi Women's<br>Auto. College, BBSR           | Utkal University        | 2011                                                                                                                                                 | 77.62 (Honors with Distinction) |
| +2 Science       | Rama Devi Women's<br>Jr. College, BBSR             | CHSE, Odisha            | 2008                                                                                                                                                 | 64.16                           |
| 10 <sup>th</sup> | Govt. High School, IRC<br>Village, Nayapally, BBSR | BSE, Odisha             | 2006                                                                                                                                                 | 81.73                           |

## **Paper Publications:**

- 1) <u>Pattnayak S</u>, Behera RK, Sahu SC, Dhal NK (2021) Assessment of woody plant species composition in secondary deciduous forest of Odisha, India. *Environment conservation journal* 22(3):327-339. (NAAS **IF=5.66**)
- 2) <u>Pattnayak S</u>, Kumar M, Dhal NK, Sahu SC (2020) Estimation of carbon pools in secondary tropical deciduous forests of Odisha, India. *Journal of Forestry Research* 32(2): 663-673. (**IF=2.36**)
- 3) <u>Pattnayak S</u>, Mandal K, Dhal NK, Das NPI, Satpathy KK and Rout NC(2019)Floral diversity assessmentand its documentation at Indira Gandhi Centre for Atomic Research, Kalpakkam. *Phytotaxonomy* 19: 67-82(**IF= 1.1**).
- 4) <u>Pattnayak S</u>, Kumar M, Sahu SC, Dhal NK and Behera RK (2018) Comparison of soil characteristics and carbon content of contrastingly different moist-mixed deciduous and evergreen mangrove forest in Odisha, India. *Geology, Ecology, and Landscapes* 3(4): 239-246. (**IF=0.83**)
- 5) Patra J, <u>Pattnayak S</u>, Dhal NK, Rath B (2018)Bioconversion of Banana Pseudostem to bioethanol, <u>Indian Journal of Environmental protection</u> 38(8):687-691. (**IF=0.13**).
- 6) <u>Pattnayak S</u>, Sahu SC, Kumar M and Dhal NK (2016) Carbon stock estimation in different forestlands: A Review. *e-planet* 14 (1): 1-11. (NAAS **IF=3.76**)

#### **Book Publication:**

Sudam C. Sahu, <u>Subhashree Pattnayak</u>, Nabin K. Dhal (2020) Trees of Chandaka Wildlife Sanctuary, ISBN: 978-93-5391-853-8.

#### **Book Chapters:**

- 1) <u>Pattnayak S</u>, Murmu D, Panda MK, Maharana R, Mandal K, Dhal NK (2020) Traditional Herbal Practices of Eastern Ghats, Odisha, India, for Treatment of Bone Fracture. In: Patra J., Shukla A., Das G. (eds) Advances in Pharmaceutical Biotechnology. Springer, Singapore, pp 145-154.
- 2) Acharya TK, Gauda S, Jit BP, Panda MK, <u>Pattnayak S</u>, Behera RK (2019) Bioaccumulation of cadmium and its toxic effect in different organs of Heteropneustes fossils. In Post-Harvest Technologies and value addition. College of Horticulture and Forestry, Central Agricultural

University, Pasighat-791102, Arunachal Pradesh. ISBN No.978-93-5396-087-2, vol-1(1), pp 71-80.

- 3) <u>Pattnayak S</u>, Sahu SC, Dhal NK (2018) Forest Structure and Composition of Chandaka Wildlife Sanctuary with special emphasis to tree diversity. In Angiosperm Systematics: Recent Trends and Emerging Issues. Ed. Priyanka Agnihotri & J.S. Khuraijam. M/s Bishen Singh Mahendra Pal Singh, Dehra Dun. ISBN: 978-81-211-0981-9, pp 377-390.
- 4) <u>Pattnayak S</u>, Murmu D, Maharana R, Sahu SC, Dhal NK (2017) Ethnomedicinal plants used for jaundice as future source of drugs: a preliminary case study in Similipal adjoining areas. In Facets of Similipal, Ed. H.N. Thatoi, pp77-95.

#### **Papers Presented:**

- 1) <u>Pattnayak Subhashree</u>, Sahoo BC, Kumar M, Sahu SC, Dhal NK (2015) "A Preliminary Study on Floristic Diversity of Chandaka- Dampara Wildlife Sanctuary, Khordha, Odisha." at International seminar on Advancements in Angiosperm Systematic and Conservation.
- 2) <u>Pattnayak Subhashree</u>, Kumar M, Sahu SC, Dhal NK (2016)"Comparison of below ground carbon stock in different forest types of Chandaka Wildlife Sanctuary, Odisha." Indian Science Congress Association.
- 3) <u>Pattnayak Subhashree</u>, Sahu SC, Kumar M, Dhal NK (2016) "Carbon stock estimation of Chandaka-Dampara Wildlife Sanctuary: A Effective Way to mitigate Climate Change" at National Environmentalist Association, Harmony.
- 4) <u>Pattnayak Subhashree</u>, Sahu SC, Dhal NK (2018)"Phyto-therapeutic values of urban medicinal plants in the fringe of Chandaka –Dampara Wildlife Sanctuary, Bhubaneswar" at Ambika Prasad Research Foundation.

#### Workshop attended:

- 1)2nd International workshop on "BIODIVERSITY AND CLIMATE CHANGE" organized by Indian Institute of Technology, Kharagpur, during 24th-27th February 2018.
- 2) Global initiative of Academic Networks (GIAN) Course on Land Use and Land Cover Change (LULCC) and their impact on climate change, from 29<sup>th</sup> October- 2<sup>nd</sup> November, 2018.

### **Achievements:**

- 1) Awarded Biju Patnaik research fellowship (2019) to pursue Ph.D. degree in Basic and Applied Sciences by Science and Technology Department, Government of Odisha.
- 2) Best poster presentation award on national seminar-2018 organized by Ambika Prasad

Research Foundation.

3) First prize on oral Presentation for the topic "Potential carbon sequestering plant species in Chandaka Wildlife Sanctuary to mitigate Climate Change" at BDCC-2018, organized by IIT, Kharagpur.

4) Awarded Post Graduate Fellowship (2011-2013) in Science by Institute of Mathematics, Department of Science and Technology, Govt. of Odisha

# **Personal Profile:**

Nationality : Indian Gender : Female

Date of Birth : 2<sup>nd</sup> April 1990

Marital Status : Married

Languages known: English, Hindi, Odia

Permanent Address: Kajala New Colony, Po/Dist.- Kendrapara, PIN-754211, Odisha.