Name of Faculty	Lakshmi Sireesha Ch.
Designation	Asst. Prof
Nature of Job/Appointment	Contract
Date of Joining	28/ 12 /2021

E-mail Lakshmisireesha_maths@cbit.ac.in

Education Qualifications	Name of the Degree	Class
PDF	Research Associate	Ongoing
Ph. D	Doctor of Philosophy (Mathematics)	Awarded
PG	M. Sc. (Applied Mathematics)	First class with distinction
UG	B. Sc	First class with distinction

Work Experience

Teaching	11 Years
Research	04 years
Industry	--
Others	--

Area of Specialization: Numerical Analysis, Partial Differential Equations(in particular Solutions to Inhomogeneous Burger's Equations)

Professional Memberships: Indian Science Congress, Indian Society of Theoretical and Applied Mechanics

Responsibilities held at InstitutionLevel: Nil

Responsibilities held at DepartmentLevel: Nil

Research Guidance: Nil

Awards Received: Got best oral presentation award in 58 th ISTAM Conference BESU University, Kolkatta during Nov 30-02 December 2015

Courses Handled at Under Graduate /Post Graduate Level.: Calculus, Differential Equations, Numerical Analysis, Integral equations, Linear Algebra, Complex Analysis, Real Analysis, Advanced Numerical Methods

No. of Papers Published

National Journals –00	--	International Journals – 11
National Conference –04	--	International Conference – 09

Projects Carried out: --

Patents: --

Invited Speaker: --

No. of Chapter Published with details

1. Fast Charging Stations for Electric Vehicles by Initial Partitions Demand, Applications of Advanced Computing in Systems Proceedings of International Conference on Advances in Systems Control and Computing, pp 37-47, Springer, April, 2021.

Details of Short-Term Training Programs/Faculty Development Programs /Seminars/Workshops/Other Trainings (Attended and/or Organized).

1. Faculty Development Program on "Student Centered Teaching Methods and Strategies in Higher Education" at NIT Warangal, India, June 3rd-5th June 2019.
2. Workshop "Teaching and Learning of Engineering Mathematics using python through Hands-on Experience" at NIT Warangal, India March 5th-10th, 2019.

International/National Journals from the Year 2013

1. "Computational results of differential difference equations with mixed shifts having layer structure using cubic non-polynomial spline", **Lakshmi Sireesha Ch.,** Y. N. Reddy, *Journal of Mathematical and Computational Science* (Scopus), Vol. 10(4) 1309-1325, 2020.
2. "Mixed Finite Difference Method for Singularly Perturbed Differential Difference Equations with Mixed Shifts via Domain Decomposition", **Lakshmi Sireesha Ch.,** Y. N. Reddy, Ain Shams Engineering Journal(Elsevier), Vol. 19(4) pp. 647-654, 2018.
3. "Numerical Integration of singularly perturbed delay differential equations using exponential integrating factor", **Lakshmi Sireesha Ch.,** Y. N. Reddy, Mathematical Communications (SCI), Vol. 22(2) pp. 251-264, 2018.
4. "Solution of Singularly Perturbed Delay Differential Equations with Dual Layer behaviour using Numerical Integration", **Lakshmi Sireesha Ch.,** Y. N. Reddy, WSEAS Transactions on Mathematics (Scopus), Vol. 16 pp. 94-102, 2017.
5. "Non- Standard Finite Difference Method for Singularly Perturbed Singular Two Point Boundary Value Problem using Non-Polynomial Spline", **Lakshmi Sireesha Ch.,** WSEAS Transactions on Computer Research (Scopus), Vol. 5 pp. 130-136, 2017.
6. "Exponentially Fitted Initial Value Technique for Singularly Perturbed Differential-Difference Equations", **Lakshmi Sireesha Ch.,** Y. N. Reddy, Procedia Engineering (Scopus), Vol. 127 pp.424-431, 2015.
7. "Solution of Singularly Perturbed Differential- Difference Equations using Higher Order Finite Differences", **Lakshmi Sireesha Ch.,** Y. N. Reddy, American Journal of Numerical Analysis, Vol. 13(1), pp. 8-17, 2015.
8. "Fitted Upwind Difference Scheme for Solving Singularly Perturbed Differential-Difference Equations with negative shift", **Lakshmi Sireesha Ch.,** Y. N. Reddy, International Journal of Applied Science and Engineering, **Lakshmi Sireesha Ch.,** Y. N. Reddy, Vol. 12(4), pp. 275-288, 2014.
9. "Fitted Second Order Scheme for solving Singularly Perturbed Differential-Difference Equations", **Lakshmi Sireesha Ch.,** Y. N. Reddy, American Journal of Numerical Analysis, Vol. 2(5) pp. 136-143, 2014.
10. "Numerical Solution of Singularly Perturbed Differential-Difference Equations with Dual Layer", **Lakshmi Sireesha Ch.,** Y. N. Reddy, American Journal of Applied Mathematics and Statistics, Vol. 2(5) pp.336-343, 2014.

International/National Conference Proceedings in the Year 2020

1. **Lakshmi Sireesha Ch.,** A Finite Difference Scheme to Solve Convection-Reaction Equation with a Delay Parameter in Convection and Reaction term, *International Conference on Advances in Differential Equations and Numerical Analysis (ADENA2020)*, Indian Institute of Technology Guwahati, October 12 - 15, 2020.