

Application of Raman spectroscopy for the study, analysis and characterization of soil bacteria, their pigments and associated metabolic processes



seit 1558

Dissertation (Kumulative)

**zur Erlangung des akademischen Grades doctor rerum naturalium
(Dr. rer. nat.)**

**Vorgelegt dem Rat der Chemisch-Geowissenschaftlichen Fakultät
der Friedrich-Schiller-Universität Jena**

Von M.Sc. Vinay Kumar B.N.

geboren am 13. 05.1987 in Bengaluru in Indien

3. PUBLICATIONS

3.1 Classification and identification of pigmented cocci bacteria relevant to the soil environment via Raman spectroscopy.....	56
3.2 Characterization of carotenoids in soil bacteria and investigation of their photodegradation by UVA radiation via resonance Raman spectroscopy.....	66
3.3 Demonstration of carbon catabolite repression in naphthalene degrading soil bacteria via Raman spectroscopy based stable isotope probing.....	99
 AUTHOR CONTRIBUTIONS	100
 CONFERENCE CONTRIBUTIONS	103
 PUBLICATION LIST	104
 ACKNOWLEDGEMENTS	105
 CURRICULUM VITAE	107
 ERKLÄRUNG	108