

International Interdisciplinary Virtual Conference on 'Recent Advancements in Computer Science, Management and Information Technology' International Journal of Scientific Research in Computer Science, Engineering and Information Technology | ISSN : 2456-3307 (www.ijsrcseit.com)

A Comparative Study of Bio-Electric Power Obtained From Bio-Galvanic Cell Arrangement Using Onion, Lemon, Orange and Aloe-Vera for Green Power Source

S. S. Haral¹, H. J. Kharat², V. S. Kale³

¹L.V.H. Research Centre Panchwati Nashik and Department of Electronics, M.V.P.S. K.A.A.N.M.S. College, Satana, Nashik, Maharashtra, India

²Department of Physics, Shankarlal Khandelwal Arts, Science and Commerce College, Akola, Maharashtra,

India

³MVPS Arts and Commerce, College, Makhamalabad, Nashik, Affiliated to SPPU, Pune, Maharashtra, India

ABSTRACT

A battery or wet cell stores chemical energy and converts it into electrical energy when proper electrodes are used. Fruit or plant as a battery consists of electrolyte solution which conducts current if proper electrodes are inserted. This work is focused on comparative study of bioelectricity obtained from Onion bulb, Lemon, Orange and Aloe vera plant for the development of Eco Friendly- sustainable power batteries using a Direct Galvanic Cell (DGC) type arrangement. The natural organic elements selected to make Biogenic Galvanic Cell (BGC) or battery contain electrolyte or gel type solutions containing acids which form a battery after insertion of positive and negative electrodes. Open circuit voltages obtained from all galvanic cell arrangements were found near about 1V. Lemon BGC was found to have better output power providing capacity. But Onion BGC has shown sustainable continuous and constant power providing more capacity than Lemon BGC it was 0.1417.

Keywords: Electrode, DGC, BGC, Power, Lemon.

Copyright: © the author(s), publisher and licensee Technoscience Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited

