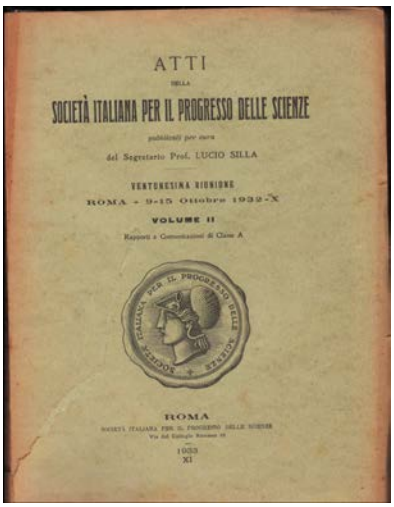
Lithium fusion since 1932 and the role of Li in the LENR: overlapping between chemistry and nuclear physics



The recent very interesting paper of Norman D. Cook and Andrea Rossi (**Norman D. Cook & Andrea Rossi**: On the Nuclear Mechanisms Underlying the Heat Production by the "E-Cat": **http://arxiv.org/ftp/arxiv/papers/1504/1504.01261.pdf** concerning a new possible model of E-Cat behaviour, adds voice to that published by Open Power both in the recent Patent Application: http://www.hydrobetatron.org/files/20150306_Brev_Abundo_DEF_deposit_Pubb.pdf and in the peer-reviewed paper on Hadronic Journal (**Ugo Abundo,** Interpretation and enhancement of the excess energy of Rossi's reactor via Santilli neutroids and nucleoids**,** Hadronic Journal Vol. 37, pages 697-737 (2014) **http://www.thunder-fusion.com/docs/abundo-paper-2014.pdf ,** dealing with the importance of the role of Li (and of Boron, according to O.P.) in the LENR field.

Since 1932, when nuclear quantum physics was at the beginning, Prof. O.M. Corbino (**Prof. O.M. Corbino,** Le nuove esperienze sulla disintegrazione degli atomi, Atti della Società italiana per il Progresso delle Scienze, vol II ,Roma 1932: **http://public.it/politica_scienza/ACTA/sips_1932_corbino.PDF** referred about reaction between *Li and protons* to produce alpha particles with several millions of electron-volt energy, employing a proton beam accelerated by an alternating voltage of **only 4000 V.**

We think that possible thermoelectric effects between Ni and Li particles may induce localization of high electric fields (and vice versa, localization of high temperatures when submitted to electric discharges) that would ignite the exoenergetic proton capture by the light elements in object.

Wathever the mechanism best fitting the experimental data, it appears now undoubted the influence of the lattice conditions (at the chemical level) and its solicitations, on the behaviour of its atoms at nuclear level.

As is known, *Open power* is carrying out an experimentation precisely in this sense, that recently was object of the "forward thinking" of the ICCF19 Committee in Italy.

Ugo Abundo – Open Power Association