סמינריון

הנך מוזמן/ת להרצאה סמינריונית של הפקולטה להנדסת מכונות שתתקיים ביום א׳ 03.10.21
(כ״ז בתשרי, תשפ״א), בשעה 10:30 באמצעות הזום : https://technion.zoom.us/j/91777789263

מרצה : דניאל אלפיסי

מנחה : פרופ׳ח מתי סאס

על הנושא:

Optimization of a Hydrogen – Bromine Flow Battery

The seminar will be given in English

תקציר ההרצאה :

Hydrogen-Bromine RFB is a promising chemistry for an EES technology. This chemistry has a fast kinetics, decreasing the activation losses leaving ohmic resistances to be the major factor in the battery resistances. Moreover, hydrogen and bromine abound in earth and, as a result, are cheaper and easy to reach than other battery chemistries. Usually, most researches done about RFB used membranes in order to control the ions crossover. In order to reduce the cost of the battery, removing membranes is one of the solutions, been expensive materials of about up to 40% of the total cost of the battery, and present important issues as dehydration produced and can be damaging, decreasing the conductivity of ions and increasing the Ohmic resistance. In this work, a carefully resistance dissection of a membraneless HBFB components was done in order to quantize the resistance contributed by each component to further optimization of every component and diminish the overall resistance of the battery and then increase the power density.

בברכה,

פרופ"ח מתי סאס
מרכז הסמינרים