

## Development of the 2 kW power mobile power unit with using solid polymer fuel cells

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At the moment mobile power units on a basis of internal combustion engines have found a wide utility.

We propose to replace them with power units on a basis of solid polymer fuel cells. The above unit of ~2kW power is being developed at the FSUE "KeRC".

Two benches for testing of polymeric-solid fuel cells with the power up to 2 kW of the Hydrogenics Test Systems firm, and one bench made by KeRC own production are available on the Center's premises.

An application of power units with using fuel cells on a basis of ion-exchange membranes on a mass scale, e.g., in autonomous power plants or in industrial production of electric power, can allow solving important problems being very urgent for the immediate future:

- to provide reproduction of electric power independent of the availability of hydrocarbon materials;
- to improve ecological setting, in particular, in regions with high power consumption;
- to increase the fuel utilization factor.

### References

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2. Korovin N. V. Electrochemical Energetics – M., Energoatomizdat, 1991