

## Alfred Elenurm, 100th birthday of the Grand Old Man of Estonian Oil Shale Research



The Grand Old Man of Estonian Oil Shale Research Alfred Elenurm celebrated his 100th birthday on May 11, 2022. Alfred Elenurm began his research career in 1951 when he started working as a junior researcher at the Institute of Chemistry of the Estonian Academy of Sciences. Alfred Elenurm received his PhD degree (Soviet Union candidate degree) in 1960 in process research of heat treatment of dictyonema shale in a solid heat carrier ewe device. Alfred's career lasted until his retirement in 2011 after having done 60 years of research. This is a significant research experience. Even after retirement, Alfred Elenurm has been an active reviewer of articles in our magazine and always consults young colleagues when they need help.

Alfred Elenurm has been the leader and responsible executor of the research groups for many projects related to the energy-technological use of oil shale, the environmental protection of the thermal treatment of fuels and the high-temperature thermal processing of oil shale and shale oil for the purpose of obtaining synthesis gas. In addition to research conducted with kukersite, Alfred Elenurm has participated in the elucidation of the chemical and technological properties of oil shales from deposits of Jordan, Bulgaria, Belarus, Ukraine, etc. Alfred Elenurm is one of the most valued specialists

in Estonia for his oil shale solid heat carrier device, and the authors of several patented inventions, such as Method for utilization of cubic residue from benzoic acid production as energy raw material in oil shale leaching or combustion process, Method for improving the quality of fuel oil by heat treatment of fuel in a solid heat transfer unit, etc. Probably no one has as much experience with solid heat carriers as he does. Alfred Elenurm has shown courage and consistency to investigate and employ this method of oil shale processing in spite of the offensive opposition of some authoritative scientists. Today, almost one million tons of shale oil is produced in Estonia using the solid heat carrier method.

We congratulate our good colleague on his respectable jubilee.

Alfred, your colleagues whom you have always astonished by your calm and invigorated by systematic work during difficult times wish you further strength and energy.