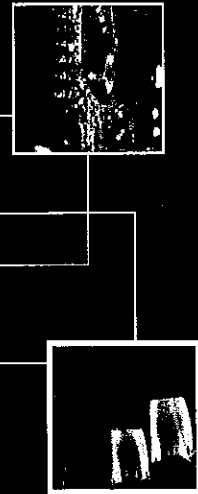


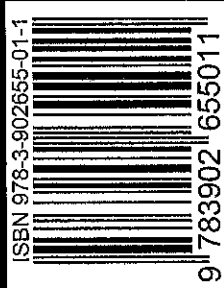
"... 2700 terms, explained and referenced."

This book contains 2700 terms from the area of combustion and related disciplines. Each term is explained and references for further reading are provided. The terms are translated from English into German, Hungarian and Slovak. This book will serve scientists, engineers and practitioners, particularly those in Central and Eastern Europe.



Editor: Dr. habil. Maximilian Lackner, Tomáš Suchý,
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Essays of Combustion



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Preface

Dear Reader,

Central and Eastern Europe is a growing community very much engaged in combustion activities ranging from highest scientific laboratory-scale work to practical application in the field using large boilers for heat and power generation.

In this glossary, more than **2,500 terms** from combustion and related fields are collected and described. Each of these terms comes with a reference so that the interested reader can go deeper. The terms are also translated into the **Hungarian, German, and Slovak** language.

Relevant expressions were selected, ranging from laboratory applications to large-scale boilers, from experimental research such as spectroscopy to computer simulations, and from fundamentals to novel developments such as CO₂ sequestration and polygeneration.

Thereby, scientists, technicians and engineers will benefit from this book, which can serve as a handy aid both for academic researchers and practitioners in the field.

The translation into German, Hungarian and Slovak was chosen



because in Central and Eastern Europe, there is a long history of combustion-related activities with a very active community. For instance, in 2008, a joint combustion meeting between Austria, Hungary and Croatia took place [1].

Another, well-established event in the community is the European Combustion Meeting ECM, which takes place in Austria in 2009 [2]. Hence this book, which is of general interest, will be of added value to people engaged in combustion in those countries [3], [4].

The authors want – also with the help of this book – to bring together the combustion community and to decrease the language barrier.

Vienna, March 2009

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1,3-cyclohexane-bis(methylamine) s. bromine number
de 1,3-Cyclohexan-Bis(Methylamin), das / **hu** 1,3-ciklohexán-bis(metil-amin) / **sk** 1,3-cyklohexán-bis(metylamin)
2,5-dimethylaniline s. bromine number **de** 2,5-Dimethylanilin, das / **hu** 2,5-dimetil-anilin / **sk** 2,5-dimetylaniľin
ab initio Starting a physical calculation only based on basic and established laws of nature without additional assumptions or special models. [1-11] **de** ab initio (vom Ursprung weg) / **sk** ab initio, neempirický

ABE-fermentation Anaerobic process utilizing bacterial fermentation to produce acetone, butanol and ethanol from starch. [1-11] (s. a. *biofuels*) **de** A.B.E. Prozess, der; A.B.E. Fermentation, die / **hu** ABE fermentáció / **sk** anaeróbná fermentácia
Abel heat test Routine test to demonstrate the absence of impurities in explosives. [1-13] (s. a. *detonation, explosives*) **de** Abel Test, der / **hu** Abel-teszt / **sk** Abelov test

abiogenic petroleum origin Alternative hypothesis to the biological origin theory of petroleum origins. [2-37] (s. a. *crude oil*) **de** abiogene Erdölentstehung, die / **hu** a kőolaj nem biogén keletkezése / **sk** abiogénny pôvod ropy

abnormal combustion s. engine knocking **de** abnormale Verbrennung, die / **hu** rendellenes égés / **sk** abnormálne spaľovanie (detonácia)

absolute viscosity s. kinematic viscosity **de** Aktivierungsenergie, die / **sk** absolútna viskozita

absorption oil Liquid hydrocarbon used to absorb heavier hydrocarbons. Syn.: wash oil. [3-72] (s. a. *natural gas*) **de** Absorptionsöl, das; Waschöl, das / **hu** elnyelőolaj; abszorbeáló olaj, mosóolaj / **sk** absorpčný olej, prací olej

absorption process Process to remove nitrogen from natural gas by using lean oil as absorbent. [2-40] (s. a. *natural gas*, *adsorption process, molecular sieve*) **de** Absorptionsprozess (Erdgasproduktion), der / **hu** abszorpció eljáráás / **sk** absorpčný proces (výroba zemného plynu)

acetone CH₃-CO-CH₃; The simplest ketone, also known as dimethyl ketone or 2-propanone. Flashpoint -17°C, autoignition temperature 465 °C. Used as gasoline additive with methanol to improve vaporization at engine start up. [3-32] (s. a. *flash point, gasoline*) **de** Aceton, das / **hu** aceton, propanon / **sk** acetón

acetylene C₂H₂; The simplest hydrocarbon alkynes. It is unsaturated compound because its two carbon atoms are bonded together with

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