

**NOTE:** Page numbers used in this Index refer to the **FIRST PAGE** of the referenced article published in the proceedings. To view the referenced article, go to the Table of Contents and click on the article with the referenced page number located to the left of the paper title.

## Cryocoolers 19

### Subject Index

- Absolut System SAS (France):  
12 L/hr PT liquefier for indus. application, 623  
20 K He forced-flow circulation loop, 547  
30-50K 2-stg EM PT cold finger testing, 49  
Brayton coolers for future EU space apps, 437  
cryostat for 30-50 K PT cooler integration, 575  
flexible thermal links for space applications, 595  
LPT6510 PT cooler for 60-150 K apps, 155
- Adiabatic Demagnetization Refrigerator (ADR):  
3-stg 50mK ADR for space applications, 479  
active magnetic refrigerator for 20 K, 495  
qual of hybrid sorption-ADR for 50 mK, 487
- AIM Infrarot-Module (Germany):  
status of AIM space PT cryocoolers, 161
- Air Liquide:  
electronics design for PT space coolers, 353  
high-power low-temp PT cooler for space, 43  
qual of large EU PT cooler for space, 147
- Applications of cryocoolers (*see* Integration with cryocoolers)
- Aselsan, Inc. (Turkey), bellows for JT coolers, 427
- Bearings, flexure springs (*see* Compressors)
- Bellows, used for J-T temperature control, 427
- Brayton cryocoolers (*see* Reverse-Brayton coolers)
- California Institute of Technology (*see* Jet Propulsion Laboratory)
- Callaghan Innovation (New Zealand):  
12 L/hr PT liquefier for indus. application, 623
- CAS, Chinese Academy of Sciences (*see* Tech. Inst. of Physics & Chemistry, Beijing *and* Shanghai Inst. of Tech. Physics)
- CEA INAC-SBT (Grenoble, France) (*see* Univ. Grenoble Alpes)
- Center for Adv Power Systems, Florida, 471
- Center National D'Etudes Spatiales (*see* CNES)
- Chart Industries - Qdrive:  
5 W at 77 K cooler for mass production, 171  
gravitational effects in PT using 3-D CFD, 183  
quantifying cryocooler contamination, 631
- Circulation Systems (for remote cryogenic loads):  
20 K He forced-flow circulation loop, 547  
cooling magnets with thermal-siphon loop, 537  
He circulation system for HTS devices, 529  
integrated refrig system for LH<sub>2</sub> operations, 513  
smart energy compact chiller for GM, 261
- Clearance seals (*see* Compressors)
- CNES (Toulouse, France):  
50mK ADR for space applications, 479
- Compressors:  
drive electronics for (*see* Drive electronics...)  
dry compact 1 kW for GM and PT coolers, 269  
high capacity turbo-Brayton compressor, 455  
LM J-T micro compressor test results, 369  
MIRI cryocooler compressor assembly, 1
- Creare, Inc.:  
heat capacity tests of 4 K regenerator, 333  
high capacity compressor for 20 K Brayton, 455  
high eff. recuperator for Brayton cooler, 447  
superconducting gravity gradiometer, 585  
vibration from turbo-Brayton coolers, 471
- Cryomech 4K pulse tube cryocoolers:  
4 K PT with large cooling capacity, 299
- CSA Medical Inc., Lexington, MA:  
gravitational effects in PT using 3-D CFD, 183
- Cubsats, coolers for:  
cooler electronics for miniature space apps, 567
- DCS Corporation (Florida):  
development of LM microcryocoolers, 65
- Dilution refrigerators (*see* Sub-Kelvin coolers):
- Drive electronics for coolers:  
cooler electronics for miniature space apps, 567  
char testing of Iris cryocooler electronics, 361  
electronics design for PT space coolers, 353  
MIRI cryocooler electronics design, 343
- Edare, Lebanon, NH:  
high eff. recuperator for Brayton cooler, 447
- Electronics, cooler drive (*see* Drive electronics...)
- Energy storage (*see* Thermal Storage)
- Erbium regenerator materials (*see* Regenerators)
- Etched foil regenerator mat'l (*see* Regenerators)
- European Space (ESA/ESTEC) activities:  
30-50K 2-stg EM PT cold finger testing, 49  
Brayton coolers for future EU space apps, 437  
cryostat for 30-50 K PT cooler integration, 575  
high-power low-temp PT cooler for space, 43
- European Spallation Source, Sweden, 463
- Fabrum Solutions (New Zealand), 623
- Flexible thermal links:  
solutions for space applications, 595