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| **List Of 2017 Reports**

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| **ID#** | **Title, First Author, and Category** | **Status** |
| [**206**](https://reporting.magnet.fsu.edu/reports/get.asp?ID=206) |  **Title:** Design and Operation of a 13 T 52 mm No-Insulation REBCO Insert for a 20 T All-Superconducting User Magnet  **First Author:** Kim, K, Applied Superconductivity Center, kwangmin.kim@asc.magnet.fsu.edu **PI:** Hahn, S, Applied Superconductivity Center, shahn@asc.magnet.fsu.edu **Category:** Magnet Materials and Magnet Technology **Facility:** Applied Superconductivity Center **UCGP:** No    **VSP:** No   **Publication Status:** Manuscript in preparation **Sign. Achievement:** **Yes** **Director's Recommendation: Yes** **Director's Comments:** An important attempt to make the first MagLab NI user magnet, even if not yet fully successful | Approved |
| [**207**](https://reporting.magnet.fsu.edu/reports/get.asp?ID=207) |  **Title:** Development of Quench Protection of Bi-2212 Test Solenoid **First Author:** Davis, D.S., ASC, NHMFL, FSU, Physics, ddavis@asc.magnet.fsu.edu **PI:** Trociewitz, U.P., ASC, NHMFL, trociew@asc.magnet.fsu.edu **Category:** Magnet Materials and Magnet Technology **Facility:** Applied Superconductivity Center **UCGP:** No    **VSP:** No   **Publication Status:** Not at this time **Sign. Achievement:** No **Director's Recommendation: Yes** **Director's Comments:** An important new venture that will likely come to full fruition in 2018 | Approved |
| [**193**](https://reporting.magnet.fsu.edu/reports/get.asp?ID=193) |  **Title:** Post Quench Behavior of a Metallic Cladding (MC) No-Insulation (NI) Coil **First Author:** Kim, K, Applied Superconductivity Center, kkim@asc.magnet.fsu.edu **PI:** Hahn, S, Applied Superconductivity Center, shahn@asc.magnet.fsu.edu **Category:** Magnet Materials and Magnet Technology **Facility:** Applied Superconductivity Center **Highest Measured Field:** 31 T **UCGP:** No    **VSP:** No   **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: Yes** **Director's Comments:** MC coils are highly interesting yet the techniques used for producing the MC surface are not yet mature. Here seems to be a cautionary tale of what might happen if the MC layer peels, allowing quench currents in the MC coil to be concentrated locally. | Approved |
| [**339**](https://reporting.magnet.fsu.edu/reports/get.asp?ID=339) |  **Title:** Reinforcement Techniques for Bi-2212 Wire **First Author:** Kim, Y, National High Magnetic Field Laboratory, Applied Superconductivity Center, kim@asc.magnet.fsu.edu **PI:** Trociewitz, UP, National High Magnetic Field Laboratory, Applied Superconductivity Center, trociew@asc.magnet.fsu.edu **Category:** Magnet Materials and Magnet Technology **Facility:** Applied Superconductivity Center **UCGP:** No    **VSP:** No   **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None | Approved |
| [**216**](https://reporting.magnet.fsu.edu/reports/get.asp?ID=216) |  **Title:** Generation of New World Record DC Field 45.5 T with a 14.4 T No-insulation REBCO Insert Operated in a 31 T Resistive Background Magnet **First Author:** Hahn, S, Applied Superconductivity Center, shahn@asc.magnet.fsu.edu **PI:** Hahn, S, Applied Superconductivity Center, shahn@asc.magnet.fsu.edu **Category:** Magnet Materials and Magnet Technology **Facility:** DC Field Facility **Highest Measured Field:** 45.5 T **UCGP:** No    **VSP:** No   **Publication Status:** Manuscript in preparation **Sign. Achievement:** **Yes** **Director's Recommendation: Yes** **Director's Comments:** None | Approved |
| [**399**](https://reporting.magnet.fsu.edu/reports/get.asp?ID=399) |  **Title:** The 32 T Superconducting Magnet Achieves Full Field **First Author:** Weijers, H.W., NHMFL, MS&T, weijers@magnet.fsu.edu **PI:** Weijers, H.W., NHMFL, MS&T, weijers@magnet.fsu.edu **Category:** Magnet Materials and Magnet Technology **Facility:** DC Field Facility **Highest Measured Field:** 32 T **UCGP:** No    **VSP:** No   **Publication Status:** Manuscript in preparation **Sign. Achievement:** **Yes** **Director's Recommendation: Yes, definitely** **Director's Comments:** None | Approved |
| [**98**](https://reporting.magnet.fsu.edu/reports/get.asp?ID=98) |  **Title:** Aging effect of Zylon **First Author:** Niu, RN, National High Magnetic Field Laboratory, rniu@magnet.fsu.edu **PI:** Han, KH, National High Magnetic Field Laboratory, han@magnet.fsu.edu **Category:** Magnet Materials and Magnet Technology **Facility:** MS & T **UCGP:** No    **VSP:** No   **Accepted by** IEEE Trans. Appl. Supercond.  **Sign. Achievement:** No **Director's Recommendation: Yes** **Director's Comments:** None | Approved |
| [**95**](https://reporting.magnet.fsu.edu/reports/get.asp?ID=95) |  **Title:** Contact Resistance between REBCO Tapes Coated with a Thin Resistive Layer **First Author:** Lu, Jun, NHMFL, NHMFL, junlu@magnet.fsu.edu **PI:** Lu, Lu, NHMFL, NHMFL, junlu@magnet.fsu.edu **Category:** Magnet Materials and Magnet Technology **Facility:** MS & T **UCGP:** No    **VSP:** No   **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None | Approved |
| [**132**](https://reporting.magnet.fsu.edu/reports/get.asp?ID=132) |  **Title:** Cu-Ag Composite Solidified Under High Magnetic Field Followed by Cold Drawing  **First Author:** Zhao, C, FSU, han@magnet.fsu.edu **PI:** Zhao, C, FSU, han@magnet.fsu.edu **Category:** Magnet Materials and Magnet Technology **Facility:** MS & T **UCGP:** No    **VSP:** No   **Published in** Metals and Materials International 23(2) **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None | Approved |
| [**122**](https://reporting.magnet.fsu.edu/reports/get.asp?ID=122) |  **Title:** Design, Construction and First Testing of a 41.5 T All-Resistive Magnet **First Author:** Toth, J.T., NHMFL, MS&T, toth@magnet.fsu.edu **PI:** Toth, J.T., NHMFL, MS&T, toth@magnet.fsu.edu **Category:** Magnet Materials and Magnet Technology **Facility:** MS & T **UCGP:** No    **VSP:** No   **Published in** IEEE Trans. Appl. Supercond. vol. 28, no. 3, April 2018, doi 10.1109/TASC.2017.2775578 **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None | Approved |
| [**167**](https://reporting.magnet.fsu.edu/reports/get.asp?ID=167) |  **Title:** Fabrication and Testing of a Bi-2223 Test Coil for High Field NMR Magnets **First Author:** Marshall, W.S., National High Magnetic Field Laboratory, wsmarshall@magnet.fsu.edu **PI:** Marshall, W.S., National High Magnetic Field Laboratory, wsmarshall@magnet.fsu.edu **Category:** Magnet Materials and Magnet Technology **Facility:** MS & T **UCGP:** No    **VSP:** No   **Submitted to** IEEE Trans. Appl. Supercond.  **Sign. Achievement:** No **Director's Recommendation: Yes** **Director's Comments:** None | Approved |
| [**179**](https://reporting.magnet.fsu.edu/reports/get.asp?ID=179) |  **Title:** Fatigue and fracture of three austenitic steels at cryogenic temperatures **First Author:** McRae, D. M., NHMFL, MS&T, walsh@magnet.fsu.edu **PI:** Walsh, R. P., NHMFL, MS&T, walsh@magnet.fsu.edu **Category:** Magnet Materials and Magnet Technology **Facility:** MS & T **UCGP:** No    **VSP:** No   **Published in** Adv. Cryog. Eng. Mater.  **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None | Approved |
| [**281**](https://reporting.magnet.fsu.edu/reports/get.asp?ID=281) |  **Title:** Predictions of Quench Behavior of the NHMFL 32T All-superconducting Magnet during Testing **First Author:** Gavrilin, A.V., Florida State University, National High Magnetic Field Laboratory, gavrilin@magnet.fsu.edu **PI:** Weijers, H.W., Florida State University, National High Magnetic Field Laboratory, weijers@magnet.fsu.edu **Category:** Magnet Materials and Magnet Technology **Facility:** MS & T **UCGP:** No    **VSP:** No   **Publication Status:** Manuscript in preparation **Sign. Achievement:** **Yes** **Director's Recommendation: Yes** **Director's Comments:** None | Approved |
| **Total Reports: 13**  |

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