



# PHOENIX NMR DOES MAS-DNP

Elevate Your Science with WB MAS-DNP NMR Probes

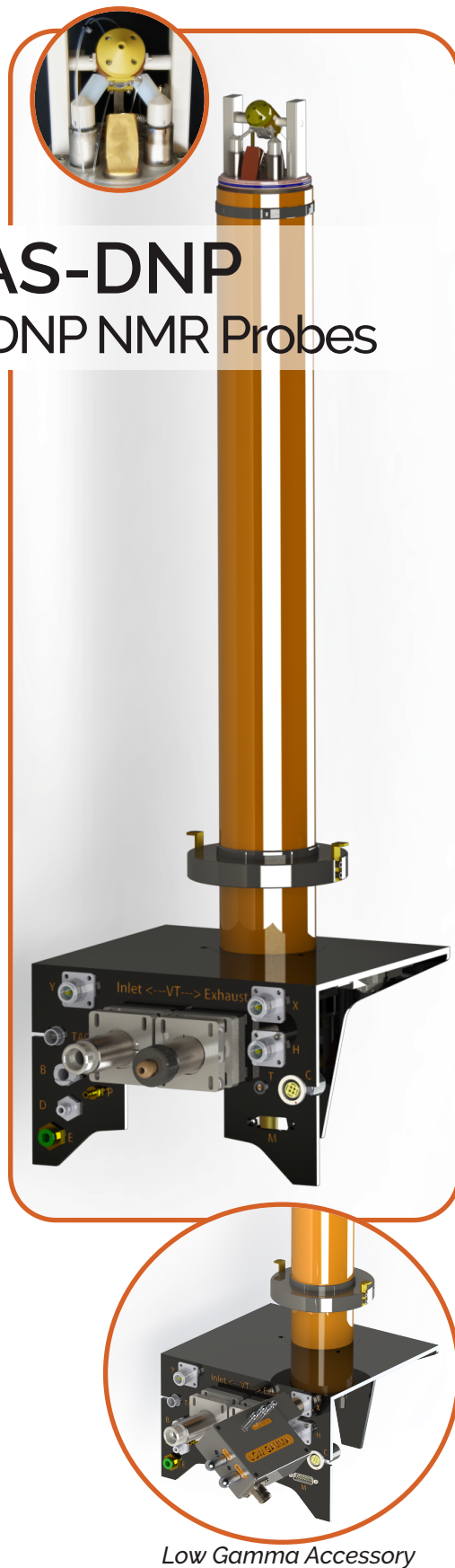
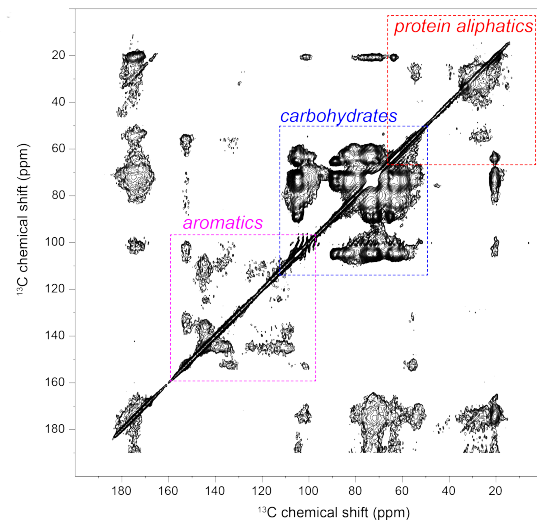
## Features of the Phoenix DNP Innovation

- Combine MAS-DNP with HXY and HX probe configurations
- Operating set-temperature range = 90 - 373 K
- 2.5 mm module spins up to MASS = 25 kHz at T = 90 K
- Insert and eject samples in-situ at cold and warm temperatures
- Modest up-front costs. Compare!
- Unique VT design minimizes cryogen use
- Available for wide-bore 9.4 T and 14.1 T systems
- Add just a Phoenix WB MAS-DNP Probe to expand a current DNP System
- Pair the Phoenix WB MAS-DNP probe and controllers with Bridge12 Technologies components for a complete DNP accessory
- Optional Simultaneous H/F operation
- Optional Low-gamma accessory

## DNP-Enhanced <sup>13</sup>C-<sup>13</sup>C Correlation

<sup>13</sup>C-<sup>13</sup>C 2D correlation of <sup>13</sup>C labeled intact plant stem (Sample and Data by Tuo Wang<sup>2</sup>). Data acquired on the 395 GHz / 600 MHz DNP NMR system at the National High Magnetic Field Laboratory in Tallahassee, FL, in collaboration with Frederic Mentink-Vigier<sup>1</sup>. MASS = 22 kHz; Sample T ~ 140 K (run at a conservative 20 lpm VT flow); DNP Enhancement = 8:1.

<sup>1</sup> Frederic Mentink-Vigier, National High Magnetic Field Laboratory, Tallahassee, Florida 32310. <sup>2</sup> Tuo Wang, Department of Chemistry, Louisiana State University, Baton Rouge, Louisiana 70803.



Low Gamma Accessory



# PHOENIX NMR

Elevating your science



**IMPLEMENTING SUPERIOR SSNMR CAPABILITIES**  
**ON YOUR DEDICATED SOLIDS SYSTEM**  
**OR ADDED TO YOUR EXISTING LIQUIDS NMR SYSTEM**



**PHOENIX NMR**

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 Tel: (970) 776-9658

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### Regional Sales Representatives

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