NINE DECADES OF THE **CENTRAL SCIENCE**

HIS COMMISSIONED PUZZLE commemorating C&EN's 90th anniversary was constructed by University of Minnesota chemistry professor George Barany and friends. To work the puzzle online, go to http://cenm.ag/90puzzle. The solution is on page 92. For other Team Barany puzzles, visit http://tinyurl.com/gbpuzzle.

ACROSS

1. Italian lover's coo 6. Flame-fancying flier 10. ____-jongg 13. Meadow moisture 16. Irish-born character actor Milo 17. Alternative to gray scale 18. Length times height, for parallelograms 19. A nitrile linker? 20. Bohr-ing basis for Schrödinger's cat? 23. Voice below soprano 24. Israeli-made weapons 25. Classic marquee gas 26. Govt. grp. currently directed by Harold Varmus 27. "Pippi Longstocking" creator Lindgren 29. It stretches from Iberia to Siberia 31. "The King and I" kingdom 32. Vehicles for Duke Ellington 33. Field that provides confirmations of life conformations 37. Scheele (1784) crystallized citric acid from these 41. Not us 42. Fancy-schmancy 43. Med. sch. subj. 44. Johnny ____, last major-league pitcher to face Babe Ruth and first to face Jackie Robinson 45. Baba ____ (Gilda Radner's SNL character) 47. It is mostly granulated silicon dioxide 51. Really small field 55. Alarmed one? 57. Garam (Indian spice mixture) 58. Bigfoot's shoe size? 59. Bahamas vacation spot 60 Calvin or B familiarly 61. Produce protection 63. Alamos preceder 64 Go ballistic 66. A little work 67. PowerPoint presentation pieces 69. Einstein, Lewis, Pauling, or Woodward, e.g. 71. One of its two possible isomers is normal 73. Change a scientific manuscript or grant proposal 74. Safe, sustainable studies at

560 nm?

79. Before: Abbr. 80. Abbr. on some invitations 81. Former Israeli prime minister Barak or Olmert 82. Head of France 83. Old MacDonald's refrain 86. It may be bound by a porphyrin 87. Grazing ground 89. Its products may be in the pipeline 95. Mary Tyler Moore's old boss 96. They might be tight or loose 97. Uranus, Neptune, Pluto, _ (eponyms for 85-Down #92 to 95) 102. Insistence on precise standards 103. Pooh's pal 104. New York theater award 106. Arabic for "commander" 107. Ella Fitzgerald's singing style 108. Movement galvanized by Rachel Carson's "Silent Spring" 113. Grammy-nominated Macy Gray song (2000) or a modest response to kudos 114 Not diluted 115. Undergo a transformation 116. "___ Macabre" (Saint-Saëns work) 117. Govt. grp. that once subcontracted work to Edward Snowden 118. Number for 85-Down, 25-Across 119. Lost buoyancy 120. Daisy also called a marguerite

DOWN

1. Chef's chapeau 2. Liar Joe in old TV car ads 3. Win by ____ (prevail, barely) 4. High I.Q. society 5. Muesli morsel 6. Concise note from the boss 7. Tournament format in chess, golf, or tennis 8. Behavioral oddity 9. One-time name of 85-Down that honored Nobelist Otto, who codiscovered nuclear fission with Lise Meitner 10. Med. technique with contrast agents and "panic buttons" 11. Agcy. spawned by the Manhattan Project, once chaired by Seaborg 12. Takes up the challenge 13. Mexican actress Dolores or Texas site of Laughlin Air Force Base

14. "Love Me or Leave Me" singer Ruth 15. Like the smell of pine needles and cedar 17. Poor paper chromatography outcome, perhaps 18. Jungian archetype 19. Job for 89-Down 21. Curie, Dalton, and Gauss, e.g. 22. Rent-___ (Hertz or Avis) 28. Some very popular B'way shows 30. Lifelong assignment, briefly? 31. Kind of pad 32. Start of an incantation 34. Huntsman home 35 Hitchcock double feature? 36. One who may be an expert on

intellectual property

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7 9 0

4

37. Multiple-PC hookup 38. Pottery worker, on occasion 39. "Gee whiz!" 40. Oklahoma tribe 44. Use an optical reader 45. Afflictions 46. Add years to one's life? 48. Gave the go-ahead 49. Not as far from 50. Analgesic or antibiotic, e.g. 52. Weights of unfilled bottles 53. Beethoven's "Für ____ 54. Sierra ____, a major producer of diamonds, gold, and titanium 55. Per ___ (yearly) 56. Italian director of the MIT Senseable City Lab, whose name is an anagram of "trait" 60. Sticker shock inducer at the car dealership: Abbr. 62. "I ____": miner's Valentine's Day message 63. Physiologist Jacques who discovered artificial parthenogenesis and was the model for Max Gottlieb in Sinclair Lewis' "Arrowsmith" 65. In the sack 68. Goal for combinatorial synthesis discovery programs (with "molecular") as well as for a school or workplace

70. ___-Magnon 72. Dog star 75. Lab denizens, stereotypically 76. ____ En-Lai 77. Attila's horde 78. Taxol source 80. Berliner's quaff 84. They have their pluses and minuses 85. 25- or 86-Across, or 9-Down, e.g. 86. Where it never rains 87. His head is a large baseball 88. Pupil's place 89. It digests proteins at pH 2 90. Product precursors 91. "____ Boom-de-ay": vaudeville song 92. Raise reason, maybe 93. "Are you ____ out?" 94. Stigma 98. Return to equilibrium 99. Schiff's base, e.g. 100. Mom to Whitney Houston or to Draco Malfoy 101. Napoléon's force 104. Arabian sultanate 105. Call's partner 109. Word in some alumnae bios 110. Beethoven prelude 111. Class-conscious org.? 112 Kerfuffle

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