touch with scientific activities, although he has almost entirely lost his eye-
sight. He received honorary degrees of Doctor of Engineering from the Tech-
nische Hochschule, Breslau, in 1913, and from the Eidgenössische Technische
Hochschule, Zurich, in 1929. We are happy to present a portrait of Professor
Emde taken about the time (1938) of publication of the third edition of his
Tables of Higher Functions. Last month a new edition of his Tafeln ele-
mentarer Funktionen (see MTAC, v. 1, p. 384–385) was published in Germany.

98. Mersenne Numbers.—In Nat. Acad. Sci., Proc., v. 34, Mar. 1948,
p. 102–103, Professor H. S. Uhler gives details of his proof (completed 27
Nov. 1947) that \( M_{193} \) is composite. Thus he brought to a conclusion work
begun in 1944 (MTAC, v. 1, p. 333) when the characters of just six of the
\( M_p \), \( p = 157, 167, 193, 199, 227, 229 \), were unknown. He has now shown
that all of these are composite. See also MTAC, v. 1, p. 404; v. 2, p. 94,
341. Professor Uhler’s final summary of some of the facts concerning the 55
Mersenne numbers is as follows:

<table>
<thead>
<tr>
<th>( p )</th>
<th>Character of ( M_p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>2, 3, 5, 7, 13, 17, 19, 31, 61, 89, 107, 127</td>
<td>Prime</td>
</tr>
<tr>
<td>11, 23, 29, 37, 41, 43, 47, 53, 59, 67, 71, 73, 79, 113</td>
<td>Composite and fully factored</td>
</tr>
<tr>
<td>151, 163, 173, 179, 181, 223, 233, 239, 251</td>
<td>Two or more prime factors found</td>
</tr>
<tr>
<td>83, 97, 131, 167, 191, 197, 211, 229</td>
<td>Only one prime factor known</td>
</tr>
<tr>
<td>101, 103, 109, 137, 139, 149, 157, 193, 199, 227, 241, 257</td>
<td>Composite but no factor known</td>
</tr>
</tbody>
</table>

R. C. A.

QUERIES

29. Pitiscus Tables.—Where may one consult other copies of English
or French Pitiscus tables, of the 1613 Pitiscus tables, and of the 1607
Rheticus-Pitiscus table, than those listed in N96?

R. C. A.

QUERIES—REPLIES

38. Log Log Tables (Q4, v. 1, p. 131; QR9, p. 336, 12, p. 373; 30,
v. 2, p. 374).—The following tiny publication of a “professeur à la Faculté
des Sciences de Paris” and an “ingénieur civil des mines” contains a 4D
table of log log \( N \), for \( N = 100.3(0.001)1.2(0.01)2.1(0.01)100(10)1000(100)\)
\( 10000(1000)39000... \): Jean Villey & Jean DieneSch, Table des Loga-
rithmes de Logarithmes. Jointe à une table de logarithmes ordinaire, permet
d’effectuer très rapidement les calculs thermodynamiques \( pvk \); les calculs
d’intérêts composés (1.03)\(^n\); et tous calculs d’exponentielles \( n^k \). Paris, Gauthier-
Villars, 1942. 8-page folded card. 8 X 13.7 cm. 7.50 francs.

CORRIGENDA

V. 1, p. 64, for lines—(11–13), read \( (a' - b') \) Its semiquadrantal arrangement with sines
and cosines on the same page; p. 160, l. −8, for 8.772, read 8.771; p. 298, l. −4, for 151,
read 156; p. 386, l. 33, for 229(6), read 229(8), and for 239(10), read 239(17).
V. 2, p. 36, in equations (1) and (2), for \( e^{ir} \), read \( e^{zir} \); p. 380, l. 27, for 296,357, read
296, 309–312, 357; p. 381, l. 12, for 56, 65, read 56, 65, 87.
V. 3, p. 186, l. 7, for 537, read 535; p. 225, l. 9, for a new one substituted., read a new one
substituted, and an important new anonymous 16-page Appendix, apparently written by
William Oughtred.