

corresponding to two-element partitions $[(N/2) + S, (N/2) - S]$ of N . These tabulated elements correspond to the elements (pN) , for $p = 1(1)N - 1$, of the transposition class of S_N , for $N = 2(1)9$. The dimension of such a representation is the quotient of $(2S + 1)(N!)$ by $[(N/2) + S + 1]![(N/2) - S]!$. When N is as large as 9 this number can be quite large; for example, the dimension of the representation corresponding to $N = 9, S = \frac{3}{2}$ is 48, so that the corresponding matrices involve 2304 elements. Since the square of a transposition is the identity permutation, the matrices corresponding to a transposition are symmetric, and it seems uselessly lavish to ignore this fact in printing the tables.

The underlying calculations were performed on an IBM 1620 in the Statistical Laboratory and Computing Center at the University of Oregon and on an IBM 709 in the Pacific Northwest Research Computer Laboratory at the University of Washington.

Following an introductory description of the theory of molecular structure using representation matrices and a discussion of the construction of such matrices, the author appends a list of errata in the smaller tables of Yamanouchi [1], Inui & Yanagawa [2], and Hamermesh [3]. Also included is a list of 11 references.

A brief description of these tables has been published by the author [4].

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1. T. YAMANOUCHI, *Proc. Phys.-Math. Soc. Japan*, v. 18, 1936, p. 623.
2. T. INUI & S. YANAGAWA, *Representation of Groups and Quantum Mechanics of Atoms and Molecules*, 2nd ed., Shohkabo, Tokyo, 1955.
3. M. HAMERMESH, *Group Theory and its Application to Physical Problems*, Addison-Wesley, Reading, Mass., 1962.
4. S. KATSURA, "Tables of representations of permutation groups for molecular integrals," *J. Chem. Phys.*, v. 38, 1963, p. 3033.

24[I].—D. S. MITRINOVIĆ & R. S. MITRINOVIĆ, *Tableaux d'une classe de nombres reliés aux nombres de Stirling*, VI., Belgrade, Mat. Inst., Posebna izdanja, Knjiga 6 (Editions spéciales, 6), 1966, 52pp., 24 cm.

The tables of ${}^v S_n^k$ for $n = 3(1)36$, reviewed in *Math. Comp.*, v. 19, 1965, pp. 151, 690, are here extended, in the same style, to the cases $n = 37$ and 38.

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25[I, L].—HENRY E. FETTIS & JAMES C. CASLIN, *Ten Place Tables of the Jacobian Elliptic Functions*, Report ARL 65-180 Part 1, Aerospace Research Laboratories, Office of Aerospace Research, United States Air Force, Wright-Patterson Air Force Base, Ohio, September 1965, iv + 562 pp., 28 cm. Copies obtainable upon request from the Defense Documentation Center, Cameron Station, Alexandria, Virginia.

This report contains 10D tables of the Jacobi elliptic functions $am(u, k)$, $sn(u, k)$, $cn(u, k)$, and $dn(u, k)$, as well as the elliptic integral $E(am(u), k)$ for $k^2 = 0(0.01)0.99$, $u = 0(0.01)K(k)$ and for $k^2 = 1$, $u = 0(0.01)3.69$. Here, as is