1116-55-280 **Jang Hyun Jo** (jhjo@sogang.ac.kr) and **Jong Bum Lee*** (jlee@sogang.ac.kr), Sogang University, Seoul, 04107, South Korea. *Nielsen fixed point theory on infra-solvmanifolds of* Sol.

In Nielsen fixed point theory for maps f on closed manifolds M, there are three important homotopy invariants $L(f), N(f)$ and $R(f)$ which are called the Lefschetz, Nielsen and Reidemeister numbers of f, respectively. It is well known that if $L(f) \neq 0$ then any map homotopic to f has a fixed point, and $N(f) \leq \min\{\#\mathrm{Fix}(g) \mid g \simeq f\}$ with equality when $\dim M \geq 3$. Hence $N(f)$ gives better information concerning the existence of fixed points than $L(f)$. However, the computation of $N(f)$ is in general much more difficult than that of $L(f)$ or $R(f)$.

Utilizing the averaging formulas for the Lefschetz, Nielsen and Reidemeister numbers of maps on infra-solvmanifolds of type (R), we compute $L(f), N(f)$ and $R(f)$ of maps f on infra-solvmanifolds of the 3-dimensional solvable Lie group Sol. (Received August 21, 2015)